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FUNGUS INFECTIONS AND THEIR TREATMENT*

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MANIFESTATIONS of disease due to fungi which are most commonly encountered are those associated with the superficial fungus infections. Until recently the incidence of dermatophytosis was mainly concerned with the fungus infections of the feet, hands and groin. However, the picture has changed to a great extent with the recent epidemic of tinea capitis.

Incidence

A number of men have investigated the problem of incidence. The largest single group of cases was the study carried out by the U. S. Public Health Service in the years 1943–1944.[1] Over 2,000 individuals living in the District of Columbia, New Jersey, Connecticut, Indiana and Louisiana were investigated in this survey. There was a seasonal fluctuation in clinical evidence of fungus disease. Dermatophytosis affecting parts of the body other than the hands and feet was rarely encountered. In that study approximately 1,400 men and about 750 women were examined. Their ages ranged from 17 to 70 years, but most of those examined were in the second and third decade of life. Based on clinical and cultural grounds, the classification of the examinees were as follows: positive, 590 (27.79 per cent); doubtful, 714 (33.63 per cent), and negative, 819 (38.57 per cent). Classified according to sex, of 1,393 men, 391 (28.06 per cent) were in the positive group, 500 (35.89 per cent) in the doubtful group, and 502 (36.03 per cent) in the negative group. Of 733 women examined, 199 (27.2 per cent) were in the positive group, 214 (29.31 per cent) were in the doubtful group, and 317 (43.42 per cent) were in the negative group.

Eight per cent of all hospital admissions in the armed services during the War were due to cutaneous diseases, and dermatophytosis ran second on the list. Weidman[2] and his associates believed that the estimates of Peck et al of the incidence of clinically active dermatophytosis was conservative. They believed that approximately 65 per cent of the population was affected. Children below the age of 10 have a very low incidence of mycoses of the feet.

Although the work of Osborne and Hitchcock[3] seems to show that the women are less affected with dermatophytosis than the men, the U. S. Public Health Service surveys did not show any significant difference in sex incidence. It will be shown later when the allergic manifestations of the fungi are discussed that probably it is here where the differences in opinion among the various authors can be explained.

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* Address delivered before the Twenty-second Annual Scientific Assembly of the Medical Society of the District of Columbia, October 2, 1951.

It was shown by cultural study that some patients in the clinically doubtful group had true dermatophytosis. There was no significant difference in sex incidence. When the same personnel were examined at different seasons the number of clinically negative patients rose from 13 to 19 per cent in the winter to 54 per cent in the summer. Thus, it can be seen that there is a definite influence of seasons as far as clinical evidence of the activity of fungus infections is concerned.

The most frequent pathogenic fungus recovered was *T. gypseum*. *T. purpureum* was next in frequency, and *E. inguinale* was recovered from an occasional case only. All of the cultures of *T. purpureum* were recovered in one locality.

Although scalp ringworm has always been endemic in a small percentage of children in this country, it is only since early 1942 that it became apparent that it had assumed epidemic proportions. The epidemic first started in large eastern centers and rapidly spread nationwide; although it has decreased somewhat, it is still of epidemic proportions. It is well established that shortly after puberty in the majority of cases tinea of the scalp disappears spontaneously.

Thousands of cases of tinea capitis have been examined in the last few years and the causative fungus isolated. Most observers[4] have noted that *M. audouini* and *M. lanosum* were responsible for nearly all of the cases of ringworm of the scalp. However, the majority of observers agree that all but a few of the patients in the present epidemic were found to be infected by *M. audouini*. The scalp ringworm due to a microsporon of animal type like *M. lanosum* is associated in a large percentage of cases with sensitization to the fungus. The human type of microsporon like *M. audouini* is much more resistant to local therapy because of the lack of accompanying sensitization.

In a recent study of the 6,598 pupils of grade and junior high schools in Hagerstown, Maryland, approximately 8.3 per cent were discovered to have ringworm of the scalp, nearly all due to *M. audouini*.[4] During the period of the study, August 1944 to November 1945, the number of boys infected was 12.1 per cent of the boys examined; the number of girls infected was 2.1 per cent of the number of girls examined. Most of those affected were under 12 years of age.

Allergic Manifestations Due to Fungi

The clinical manifestations caused by both bacteria and fungi can be divided roughly into 2 large groups: those which are directly due to these organisms and those special forms which have arisen because of the development of sensitization to the organisms and/or their products. These last manifestations have been grouped under the heading of cutaneous microbids.

The clinical manifestations of microbids depend on development of acquired hypersensitivity to the organisms and/or their products after the primary infection has existed for some time. The degree of acquired hypersensitivity is dependent on the causative organism, on individual predisposition, and on many other factors which cause more intimate contact between the living organisms and the living cells.

In the group of microbids, we have trichophytids when the trichophyton fungus is the primary cause of the lesion, epidermophytids when an epidermophyton is the causative organism, and levurids when monilia cause the primary infection. Trichophytids is the general term which has been applied to the microbid associated with fungus infections. The term in the literature has often been shortened to "ids."

The allergic manifestations due to fungi which are most commonly encountered are those associated with the superficial fungus infections. Of these, almost all are associated with infection due to *T. mentagrophytes*, especially dermatophytosis of the feet.

PATHOGENESIS OF TRICHOPHYTIDS

The epidermophyton and trichophyton fungi grow in the nonliving layers of the skin and its appendages. Because of this fact they give rise to clinical manifestations which are primarily of a very superficial nature. Marked inflammation does not develop unless living structures are invaded. Invasion by the fungi of living structures or contact of fungi or their products with the living parts of the skin probably initiate the hypersensitivity with its resulting allergic manifestations.

A sine qua non for the development of trichophytids is a hypersensitivity to fungi or their products. This sensitivity is revealed by a positive trichophytin reaction. Fortunately the trichophytin test represents a group reaction in the majority of instances. This means that the test does not usually have to be made with the identical fungus causing the lesions. Previously it was thought to be present only in the deep inflammatory fungus infections such as kerion celsi. Recently, however, it has been demonstrated that even superficial fungus diseases were frequently accompanied by sensitivity to trichophytin. The hypersensitivity to fungi develops after the primary infection has existed for some time. The period between onset of infection and the development of hypersensitivity varies from a few months to several years, depending on the type of fungus, the site of the primary infection, and the infected individual.

It is very difficult to determine whether atopy plays a role in the development of this hypersensitivity. In the available statistical data a history of atopy seems rather unimportant, especially as far as the epidermophytids on the hands are concerned.

If we were to assume that not only the fungi but also their toxins can give rise to trichophytids, it would be easy to understand why trichophytids are usually sterile. Such an assumption, however, would not explain the localization of epidermophytids on the hands only, secondary to the fungus infection of the feet in the presence of a generalized skin sensitivity. Furthermore, it has not been possible to demonstrate such circulating toxins while positive blood cultures for fungi identical with those causing the primary infection have been obtained.

It is within the realm of theoretical possibilities that contact with primary lesions can cause transportation of the organisms to other parts of the body and give rise to trichophytids by contact. The eruptive character of most of the microbids speaks against such a conception. Such a possibility must be borne in mind, however, when nonsymmetrical isolated lesions are found which are considered to be trichophytids, especially those in which the organisms are more readily demonstrated. It is even conceivable that organisms of great virulence can reach areas of skin hematogenously and, in the presence of a moderate degree of hypersensitivity, pass through all barriers to give rise to lesions which are real secondary foci of epidermophytosis (trichophytosis).

There are certain experimental and clinical criteria which must be present to support the diagnosis of "ids." Such criteria are as follows:

1. The causative organism must be demonstrated in what is recognized by everyone as a classical manifestation of the disease.
2. Although it is not absolutely essential, the organism which is cultured from the primary lesion should be pathogenic.
3. A positive reaction analogous to a tuberculin or a trichophytin reaction must be present.
4. What is considered to be microbid should be seen as a frequent accompaniment of the primary lesion.
5. Positive blood cultures for the same organism isolated from the primary lesion must be obtained, since it is admitted that most of the microbids are hematogenous eruptions. This is necessary because there is no reliable method of demonstrating the presence of circulating toxins.
6. The microbids must develop subsequent to the primary infection.
7. The microbids must usually be sterile.

8. A support for the conception of a skin eruption as an "id" lies in certain clinical characteristics: (a) appearance of the "ids" in showers, (b) tendency to symmetry in distribution because of hematogenous origin, (c) tendency to spontaneous involution after healing of the primary focus, and (d) focal reactions after injection of sufficient amounts of microbidin.

Although it is true, as is the rule for other microbic diseases, that different fungi can elicit the same clinical picture and that totally different skin manifestations can be found associated with the same fungus, it was found, fortunately, that in the majority of instances we could associate the various types of trichophytids with certain of the primary fungus diseases. Thus, the lichen trichophyticus usually accompanied markedly inflammatory fungus infection such as kerion celsi (trichophytosis), while the dyshydrotic eruptions of the hands were usually found associated with the epidermophyton infection of the feet.

The localization of the embolized fungi and the site of greatest skin sensitivity play an important part in the morphology of the resulting trichophytid. If the organisms finally become localized in the vasa vasorum of the subcutis, a subcutaneous trichophytid (erythema nodosum) develops; if they become localized in the vessels of the hair follicle, lichenoid forms result; if the epidermis is a special site of sensitivity, eczematoid trichophytids are found; and, if the hypersensitive organism is flooded with toxins, diffuse scarlatiniform eruptions are seen.

Types of Tricophytids

As can be seen from table 1, the trichophytids can be classified under 4 headings, depending on their histologic and clinical characteristics. The epidermal and cutaneous types are the most common. The lesions under group IV have been recognized only lately as trichophytids, and I have observed several cases in which the recurrent phlebitis seems to be accompanied by other vascular sensitivities, even epileptiform seizures. No doubt the most important and frequent trichophytid observed is that accompanying epidermophytosis. The epidermophytosis is usually on the feet, while the epidermophytids are on the hands. The essential proofs for their relationship, as laid down in previous paragraphs, have been well established in this important group by the work of Peck and Jadassohn.[5] Even such difficult evidence as positive blood cultures for fungi has been presented by Peck,[6] Strickler, Ozellers, and Saletel. Furthermore, Peck has been able to reproduce the whole clinical syndrome experimentally in humans. This was the first time that a spontaneous experimental trichophytid had been reproduced in a human subject.

TABLE 1

Types of Trichophytids

I. Epidermal trichophytids (epidermis mainly involved)
  1. Eczematoid (dyshydrotic)
  2. Lichenoid
  3. Parakeratotic
  4. Psoriasiform

II. Cutaneous trichophytids (papillary body mostly involved)
  1. Diffuse forms
    a. Scarlatiniform exanthemata and enanthemata
    b. Erythroderma
  2. Circumscribed and disseminated forms
    a. Follicular localizations usually lichenoid
    b. Not exclusively follicular
      (1) Macular, papular and even exudative eruptions
    c. Erysipeloid

III. Subcutaneous trichophytids (nodules found in the hypoderm of the type of erythema nodosum)
  1. Acute resolving form
  2. Destructive chronic form

IV. Vascular trichophytids
  1. Migrating phlebitis (venous)
  2. Urticaria (capillary)
  3. Purpuric

Recent literature, both foreign and American, has become increasingly filled with the discussion of levurids, those mycids which are due to monilia. Ravaut, a pupil of Sabouraud, described the first cases. Very interesting examples of such eruptions have been demonstrated by Ramel.

Hopkins and others.[7] As Bloch[8] has pointed out, in discussing the research of Staehelin from his Institute, it is very difficult to prove that an eruption is a levurid. One of the chief stumbling blocks seems to be to prove a pathogenic role for monilia cultured from what is called the primary lesions.

The importance of monilia and their allergic manifestations are becoming increasingly evident. This is so because there is an apparent rise in the growth of monilia following the ingestions of many of the antibiotics, especially the mycins such as aureomycin, terramycin, etc.

To obtain an approximate idea of the incidence of trichophytin sensitivity and the importance of the trichophytin test as an index of this sensitivity, in 1944 Peck and his group studied 776 persons living in different sections of the country. Of these, about 42.53 per cent had a reaction which varied from 1 to 4 plus. It was interesting to note that of the 558 males tested, 48 per cent showed a positive reaction, while of the 218 females tested, 29.96 showed a positive reaction. Apparently, as has been shown in further work, there is a sex linkage in the development of sensitivity to fungus antigen. Lewis and Hopper[9] in their work found that 60 per cent of their patients infected with *T. gypseum* showed a positive reaction to trichophytin. The number of trichophytin reactions rose to 87 per cent when definite clinical activity was present. The studies of Peck and his group showed a similar rise both in incidence and intensity of the trichophytin test when active fungus infection was present. In another study conducted in 1948 Peck and his group examined 406 adults living in and around New York. Of these, 27.4 per cent were found to be positive to trichophytin. The 250 males studied showed 36.9 per cent to have positive reactions, and the 156 females studied had positive reactions in only 14.2 per cent. This is in line with the studies they published in 1944. About 100 children were studied under 12 years of age for trichophytin sensitivities, and there were no positive reactions in any of this group.

Trichophytin may be defined as an extract of fungi which is used both for diagnosis and treatment. It has been firmly established by many investigators since the original preparation of trichophytin in 1902 by Plato and Neisser that the positive reaction following the intracutaneous administration of this substance is due to a specific sensitivity resulting from a fungus, that is, a trichophyton infection.

Fungi of the epidermophyton, trichophyton and other genera contain a general sensitizing factor, so that, as stated previously, a patient infected with a trichophyton, in whom a hypersensitivity has developed, will show a positive trichophytin reaction with an extract made from any of these organisms. According to Jadassohn, Schaaf, and Laetsch there is an additional specie-specific excitant which may not be present in any other members of the group. Because the reaction of sensitivity may be limited to this specific excitant, one may occasionally obtain a negative reaction to a trichophytin test even in the presence of "ids," if the specific trichophytin used lacks this substance.

Trichophytin, as it is commercially available, is a complex material, probably containing a number of different antigens, the potency of which is dependent to a great extent on the method of preparation.

Peck and Glick[10] in a series of experiments were able to show that the skin-reactive factor which is responsible for the elicitation of a positive cutaneous reaction to trichophytin is found in both the bouillon and the pellicle of a culture of *T. gypseum* on Sabouraud's bouillon. This skin-reaction factor could be demonstrated to be present in the pellicle from the latter's earliest appearance. In their experiments, enough pellicle material could be gathered in 7 days to demonstrate this specific factor. Such concentrations remained at approximately the same level throughout the whole period of the experiment, that is, 66 days.

In the bouillon, however, the concentration of the skin-reactive factor increased with the age of the culture under ordinary growth conditions. It could be demonstrated to be present in 7 days, but it reached its maximum concentration in 40 to 50 days under varied experimental conditions.

T. purpureum formed less skin-test principles than *T. gypseum* under the same experimental conditions. This is of interest since it is known that infection with *T. purpureum* is usually not associated with a positive trichophytin test. The total nitrogen content of trichophytin was found to bear no relation to the amount of skin-test factor present in bouillon.

Peck and Hewitt[11] in 1945 were apparently able to demonstrate that several members of the group of fungi occurring in clinical lesions of dermatophytosis were found to elaborate a factor antagonistic to certain other microörganisms. This factor appeared to be similar to penicillin in the following respects: (a) enhanced production on media containing corn-steep liquor; (b) spectrum of activity and behavior toward penicillin-resistant organisms; (c) sensitivity to pH and temperature, and (d) destruction by clorase.

Relationship between Fungus Infections and Penicillin Sensitivity

So far it is apparent that fungus antigens play an important role in eliciting allergic manifestations in the general population both because of the high incidence of fungus infection and because a relatively large number of those infected acquire a sensitivity to the fungi and/or their products. With the introduction of the antibiotics into therapeutics, however, the importance of the fungus antigens as causes of allergic reaction has immeasurably increased.

The clinical reactions to penicillin are of 2 major types: reaction of the urticarial, serum-sickness-like type, and reactions with an erythemato-vesicular eruption resembling the trichophytids.[12]

The urticaria and erythemas, together with joint pain, and fever in some instances, comprise the commonest allergic reactions to penicillin. The induced urticarial form of penicillin allergy is often temporary, even transient in character. This is an induced sensitivity and requires a definite incubation period varying from 5 days to 3 weeks. In a recent study by Peck et al[12] it was shown that among 130 patients who received penicillin there were 25, or about 19 per cent, who exhibited such an acquired sensitivity. In approximately 40 per cent of those developing this sensitivity a positive penicillin test of the delayed type could be elicited. Previous fungus disease is not considered to have played a role in this form of induced sensitivity.

Penicillin reactions of the erythemato-vesicular type resemble trichophytids. This form of penicillin sensitivity may be conceived of as existing in a latent and active stage. The latent stage is characterized simply by the presence of a positive 48-hour penicillin skin test without any history of previous penicillin administration. Attention to the so-called "spontaneous" positive skin test was first drawn by Welch and Rostenberg.[13, 14] The active stage, based upon the preexisting latent sensitivity, appears after exposure to penicillin and resembles the trichophytid because it is characterized by an erythemato-vesicular eruption which tends to localize primarily on the hands, feet and groins, but may become generalized.

Among 276 adults who had not received penicillin there was an incidence of 5.4 per cent with a positive delayed reaction to pencillin. Welch and Rostenberg[13,14] in a small series tested found an incidence of 5 per cent. Sixty-five children below 12 years of age were tested and none showed a positive reaction. Similar observations were reported by Cormia and Lewis.

The work of Peck and Hewitt explains the mechanism by which dermatophytons may induce a positive penicillin test and ultimately lead to reactions to penicillin which resemble those of the trichophytids. The results of their investigations, as previously cited, showed that the common pathogenic fungi mainly responsible for many of the dermatomycoses are capable of producing an antibiotic possessing many of the properties of penicillin. In the course of a fungus infection of the skin there are a number of antigens elaborated by the infectious agent. One of those is responsible for the positive trichophytin test and trichophytin sensitivity, and another leads to the so-called "spontaneous" penicillin test and represents the latent phase of penicillin sensitivity.

The relationship of the incidence of the "spontaneous" positive penicillin test to the trichophytin reaction is of interest. The trichophytin test carried out simultaneously in the patients who have not received penicillin treatment showed positive reactions in 33.3 per cent. Among the penicillin-positive patients there were 60 per cent who had showed a positive trichophytin reaction, practically twice as frequently as among penicillin-negative individuals. Furthermore, the percentage of patients sensitive to penicillin among trichophytin-positive individuals was 9.7 per cent as against 3.2 per cent among trichophytin-negative persons. Additional evidence of the relationship between previous fungus infection of the skin and trichophytin sensitivity on the one hand and "spontaneous" penicillin sensitivity on the other, is found in our observations on 165 children ranging in age from 2 months to 12 years who had never received penicillin. In none of these was either the penicillin or trichophytin test positive. These negative findings are in accord with the known fact that, even if present, fungus infections in the form of dermatophytosis rarely produce sensitivity to trichophytin in children below 12 years of age.

It has been shown that in spite of practically the same incidence of fungus infection among males and females there was a much higher percentage of males who acquired a sensitivity than females. This trend also applies to penicillin sensitivity. Among 130 patients who received penicillin there were 32 with skin eruptions, 34.2 per cent of all males developing them as against only 8.3 per cent of females.

Among 276 adults whom we treated who had never received penicillin, there were 164 males, of whom 6.05 per cent showed the so-called "spontaneous" positive reaction. Of 108 females only 4, or 3.7 per cent, showed a positive reaction.

The active stage of penicillin sensitivity occurs during treatment. Unlike the induced form, this reaction can occur on the first day or two or even on the first administration of penicillin. We had 7 such cases. All were males, and the trichophytin and penicillin tests were positive in each case. The much higher incidence of positive penicillin and trichophytin tests in this group than in the urticarial form of reaction is indicative of preexisting sensitivity and its relation to fungus disease. Patients with this type of penicillin sensitivity usually have persistent penicillin allergy of varying degrees. There is no common antigen between crystalline penicillin and trichophytin.

TREATMENT OF FUNGUS INFECTIONS

Dermatophytosis of the hands and feet. When there are acute manifestations with vesiculation and eczematization, unless it is due to previous treatment it can be assumed in the majority of cases of dermatophytosis of the hands and feet that there is a fairly high degree of sensitivity to the fungi present. This can be demonstrated by the trichophytin test. Under such circumstances, only the mildest treatment is indicated. Even when there is a chronic fungus infection of the feet with a high degree of trichophytin sensitivity, the use of strong fungicidal preparations is to be avoided since it can precipitate "ids."

In the acute stages soakings in warm potassium permanganate footbaths (1:8,000 to 1:16,000) for 15 minutes twice a day or the use of 3 to 5 per cent sodium propionate footbaths are very helpful. Sopronol liquid can be used in the same way (1 teaspoonful to 1 quart of water) for the footbath if the sodium propionate powder is not available.

It is not uncommon in the acute stages to have secondary infection with actual pustular formation. A simple method of treatment here is the application of wet dressings of $\frac{1}{8}$ or $\frac{1}{4}$ per cent silver nitrate solution or wet dressings with terramycin or one of the other antibiotics other than penicillin can be tried. If the acute manifestations are less evident, antiseptic ointments in the form of aureomycin, terramycin or a preparation containing bacitracin or tyrothricin can be used. Once the acute manifestations are over, it is recommended that one of the fatty acid-containing ointments be used since they are less likely to precipitate "ids." Such ointments are exemplified by preparations like Sopronol and Desenex. If there is a high degree of sensitivity, even these ointments should be used in one-half or one-third strength with petrolatum. If improvement takes place, a tincture such as one of the following can be tried:

	Gm.
Sodium propionate	10.0
Salicylic acid	3.0
Menthol	1.0
Phenol	1.0
Alcohol q.s. ad	100.0
or	
Castellani's paint	

The formula for Castellani's paint is as follows:

	Gm.
Saturated alcoholic solution basic fuchsin	10.0 (10%)
Aqueous solution phenol (5%)	100.0
Filter and add:	
Boric acid	1.0 (1%)
After 2 hours, add:	
Acetone	5.0 (5%)
Resorcin	10.0 (10%)

In the chronic eczematoid cases it may be necessary even to use a mild tar ointment at some stages during treatment.

In the chronic resistant cases which are exemplified in infections such as those due to *T. purpureum* it may be necessary to use very strong fungicidal remedies. This is so because those infections are usually not accompanied by sensitivity to the fungi, and their products and the precipitation of "ids" is very unlikely. In those cases, Arning's tincture, if obtainable, is very useful, or preparations such as $\frac{1}{10}$ per cent chrysarobin in zinc paste or 3 per cent chrysarobin in chloroform may have to be tried.

Lesions recognized as trichophytids will gradually disappear once the primary focus is treated. However, when they are present they should be treated as any dermatitis, but the use of fungicides is not only not necessary but is contraindicated. In such cases the use of mild wet dressings, mild ointments and small doses of X-rays are sometimes very helpful. Here, if there is doubt whether one is dealing with trichophytids or actual fungus infections, especially with eczematoid lesions on the hands, the fatty acid ointments such as Sopronol or Desenex in half strength will not irritate and will act as a mild soothing preparation.

The majority of authors who have written on this subject in the last few years have been unanimous in their opinion that desensitization with trichophytin has been of relatively little value. This is not quite true. As has been stated previously, it is not that the theoretical and practical applications of this form of treatment have been proven valueless, but that the commercially available extracts leave much to be desired.

In cases of chronic recurrent eczematoid dermatophytids, it is sometimes most valuable to use trichophytin properly, and it has proved to be invaluable in many cases. The important fact to remember is that the trichophytin test must produce of itself an eczematoid reaction and the desensitization should be carried past the point where injections of 1:10 concentration of trichophytin used fail to elicit any sort of local reaction.

I have used a trichophytin made in my own laboratories and in certain cases made from the fungus isolated from the patient in question.

Tinea capitis. It is absolutely essential in this disease that an attempt be made to isolate the fungus causing it in order that a prognosis can be given. The Wood's light gives us a rapid diagnosis, since with this instrument a brilliant green fluorescence is found when the common fungi, that is, *M. audouini* and *M. lanosum*, are the etiologic factors. Cultures are important because the animal type of ringworm, that is, *M.*

lanosum, usually is much more amenable to local treatment. Treatment can be divided as follows:

In sporadic cases there is no doubt that the most valuable approach to the treatment of tinea of the scalp, especially in the type due to *M. audouini*, is X-ray epilation. This, of course, is to be carried out by a specialist in order to avoid permanent baldness. It is important even in these cases to follow up the treatment with the use of the proper local antiseptics once the hair has fallen out.

In epidemic cases, because of the large number of cases involved, it is impractical and even impossible to attempt X-ray epilation as the treatment of choice. In addition, there is a problem of the epidemic itself which must be considered. For this reason, the following recommendations are made:

1. If the health authorities agree, infected children should not be kept away from school. However, each infected child must have the hair clipped close to the scalp and kept short by clipping the hair every 10 days. Loose hairs may act as foci of infection. The parents should be instructed to examine the headgear of the children, especially the boys, since old infected hairs may be present to act as foci of reinfection.

2. The parents must be warned of the role of the barber shop as a possible focus of infection. They should insist that the barber sterilize his equipment before cutting the child's hair. If the barber is not equipped for special sterilizing methods, such as keeping the instruments in oil at 100°C., a simple method consists in the use of a 1 per cent solution of lysol or liquor cresolis saponatus USP at 100°C., which will sterilize instruments within 2 minutes.

3. The children should be examined under the Wood's light, and the areas of fluorescence pointed out to the parents and marked off with a skin pencil, and the parents should be instructed to treat these areas especially well.

4. While under treatment the child should wear a close-fitting skull cap at all times. Such caps are to be worn in the classroom. Each child should have at least 4 or 5 caps. The cap should be changed daily and boiled for 10 minutes before washing. Only one person should remove the skull cap.

The following are the recommended forms of local treatments:

a. The head is shampooed before each visit to the doctor.

b. There is used as a local treatment a number of recommended ointments, such as propionate-caprylate ointment, copper undecylinic acid ointment, and salicylanalide ointments or propionate caprylate liquid. A practical method which I have found fairly effective is the use of ointment at night, shampoo in the morning, and fungicidal solution or one of the other ointments, again following shampoo. This can be carried out daily at home.

c. Under the Wood's light the doctor removes all loose fluorescent hairs. This is a very important part of the treatment.

d. If after 30 treatments to the scalp of a proven local medicament, there should be noted a spread to other areas of the scalp, a change should be made to another medicament which has proven to be of therapeutic value in at least 30 per cent of a fairly large number of cases treated. If after another 30 days' trial there is no progressive improvement, X-ray epilation should be resorted to.

e. Parents must be given written and verbal instructions during the first visit and reinstructed several times during the course of treatment and observation.

f. A patient is considered cured only when 4 to 6 weekly examinations reveal the absence of fluorescence.

The last visit should include, as a final check, cultures and direct examinations of any suspected hairs.

Fungus infection of the nails. The common etiologic agents are *T. gypseum* and *T. rubrum*. A few clinical characteristics must be borne in mind, which are as follows:

1. The toenails are more often involved than the fingernails.

2. The infection begins distally or at the lateral borders.

3. Whitish patches are often the only manifestation of a fungus infection.

4. Subungual keratosis with separation of the nail plate is often found.

5. Paronychia is rare.

6. The disorder is rare in children.

7. When there is inflammation present the prognosis is better.

Locally the following procedures are recommended in the treatment:

The nail should be scraped down with a file or scalpel, or better yet by a small electric burring machine. It is advisable that the physician himself should do the burring. (The removed parts of the nail should be collected on paper and burned.)

After thorough scraping, the following remedies are recommended for application:

Whitfield's ointment with 1 per cent thymol is rubbed thoroughly into the nail. Instead of this ointment Sopronol or Desenex ointment may be applied. In long-standing cases Anthralin ointment, 0.25 per cent, or 5 per cent chrysarobin in collodium may be painted on.

A 10 to 20 per cent potassium hydroxide solution may be applied half an hour before application of the above-mentioned remedies in order to soften the nail.

A 40 per cent salicylic acid plaster, cut to cover the nail and changed daily, is recommended by Royal Montgomery.

The old medicament must be scraped away before any new application is made.

Complete evulsion of nails cannot be recommended, since recurrences almost invariably follow.

Months of intensive therapy are usually necessary to obtain results. But the patient should be made to realize that he must coöperate; otherwise the nails will be the source of relapses of dermatophytosis of the feet and hands.

In some instances X-ray treatment has proven beneficial, but it must be borne in mind that this procedure does not kill the fungi. It should be pointed out that overtreatment, especially surgical removal of the nails, will lead to malformations without a cure in most instances.

The discussion of the treatment of fungus infections has been limited to fungus infections of the hands and feet, the scalp and the nails, since space does not permit a presentation of this sort for more detailed talks of the various fungus diseases.

Summary

There is reviewed the mechanism responsible for the allergic manifestations accompanying fungus diseases. The varied clinical manifestations due to fungus allergy are given in detail. Methods for the diagnosis of both fungus diseases and their allergic manifestations are presented.

The relationship between previous fungus infections and reactions following the administration of antibiotics, especially penicillin, are discussed in light of recent findings.

The therapy of fungus infections, particularly tinea capitis, is given in some detail.

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APPLICATION OF ELECTROPHORESIS TO MEDICAL PROBLEMS

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IN RECENT years the boundaries between the various sciences have overlapped considerably and it is no longer surprising that physical-chemical methods have been utilized to investigate clinical problems. There has been a wide and varied application of electrophoresis to them since various types of apparatus based on the ideas of Tiselius[1] and Svensson[2] have become available. This paper is not an attempt to cover the field completely but will be limited to those aspects of the subject bearing directly on clinical problems. For a complete review see the article by Stern and Reiner.[3]

Electrophoresis may be defined as the migration of charged particles in electrical fields. In the moving-boundary method the progress of the boundaries formed between colloidal (such as protein) and buffer solutions may be followed by optical methods. This is possible because of the differences in refractive index between the buffer and the protein fractions at the boundaries ("schlieren"). Tiselius[4] in 1937 examined horse serum in his apparatus and observed 5 boundaries of different electrophoretic mobility; it was for this work that he received the Nobel prize. The fastest boundary was identified as albumin; the 3 following were recognized as 3 different globulin components, alpha, beta and gamma globulin in decreasing order of mobility. Shortly afterward the stationary delta boundary observed in the ascending limb of the apparatus and the corresponding epsilon boundary in the descending limb were recognized as boundary anomalies, largely because of the transport of buffer ions by the proteins during electrophoresis but also partly because of a superimposed general protein gradient rather than an additional individual protein component.

The number of boundaries observed in electrophoresis experiments on serum or plasma depends upon the type of buffer employed and the species under study. Longsworth[5] has shown that the use of a barbital buffer at pH 8.6 and an ionic strength of 0.1 leads to the resolution of human plasma into 6 well-defined components, namely, albumin, alpha$_1$, alpha$_2$, beta and gamma globulins in addition to fibrinogen. The ascending and descending boundary patterns are not identical. In general, the rising or ascending boundary is better defined than the falling or descending one; the beta peak in the descending limb shows a peculiar spike probably due to a reflection phenomenon. Figure 1 presents a characteristic normal serum protein pattern (ascending boundary).

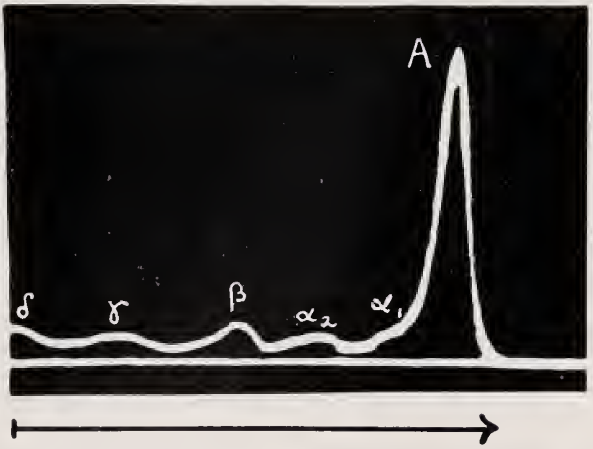


FIG. 1. Representative electrophoresis diagram of normal human serum, recorded with slit diaphragm. Serum diluted with 2 volumes of diethylbarbiturate buffer, pH 8.6, ionic strength, 0.1. Duration of experiment 8,580 seconds at 1.9°C., and a potential gradient of 4.5 v./cm. Protein concentration, 2.35 per cent. Explanation of symbols: A, serum albumin; α_1, alpha$_1$-protein; α_2, alpha$_2$-globulin; β, beta-globulin; γ, gamma-globulin; δ, stationary anomalous boundary, due to protein-buffer salt gradient.

Under patho-physiologic conditions there may be an increase in the area under any one of the protein peaks. However, since Cohn and his associates[6] have found at least 33 components of human plasma, the increase may be due to an anomalous or specific protein of similar mobility such as immune bodies, Bence-Jones, or lipoprotein complexes rather than an increase in the amount of one of the normal components. So far about 4 $beta_1$, 3 $alpha_1$, several $alpha_2$, and at least 4 different gamma globulins have been separated. In general the fractions are associated with other molecules as follows: Albumin may combine with bilirubin, bile salts, sulfonamides, salicylates and many other drugs, dyes, mercury, arsenic and fatty acids.[7] The $alpha_1$-globulin fraction may contain acid glycoprotein, bilirubin-globulin and lipoproteins (steroids and carotenoids). The $alpha_2$ fraction contains the glycoproteins and mucoproteins which combine with carbohydrates. The $beta_1$ fraction accounts for about 75 per cent of all the lipids in the plasma including cholesterol, phosphatids, carotenoids, vitamin A and estrogens; there is also a metal-combining iron and copper protein $beta_1$ fraction. Some antigens are associated with the $beta_2$-globulin fraction. The gamma-globulin fraction may contain antigens, antitoxins, antibodies, and allergic reagins. There are many other plasma protein fractions that take part in the blood clotting and hemorrhagic reactions which are separable by other means than electrophoresis. The separation of pure fractions is extremely complex, since each fraction may be considered as an envelope enclosing many substances in addition to the particular "normal" protein fraction.

The figures obtained for albumin and "globulin" by the Howe (sodium sulphate) method must be somewhat revised, since it has been shown that this method does not achieve a clear-cut separation between the albumin and globulins (A/G ratio). The so-called pseudoglobulin and euglobulin preparations which may be obtained by salting-out and dialysis methods represent mixtures; pseudoglobulin was found by Tiselius to contain 85 per cent alpha-globulin and 15 per cent gamma-globulin, while euglobulin contains more beta and gamma but less alpha-globulin. Discrepancies will be found between the conventional "salting-out" and the electrophoretic method of serum protein separation. This is due to the incomplete precipitation of the globulins whereby some alpha globulin is usually left with the albumin fraction. This is more pronounced in some diseases, particularly those involving the liver and kidney, in which the proteins are changed qualitatively as well as quantitatively.

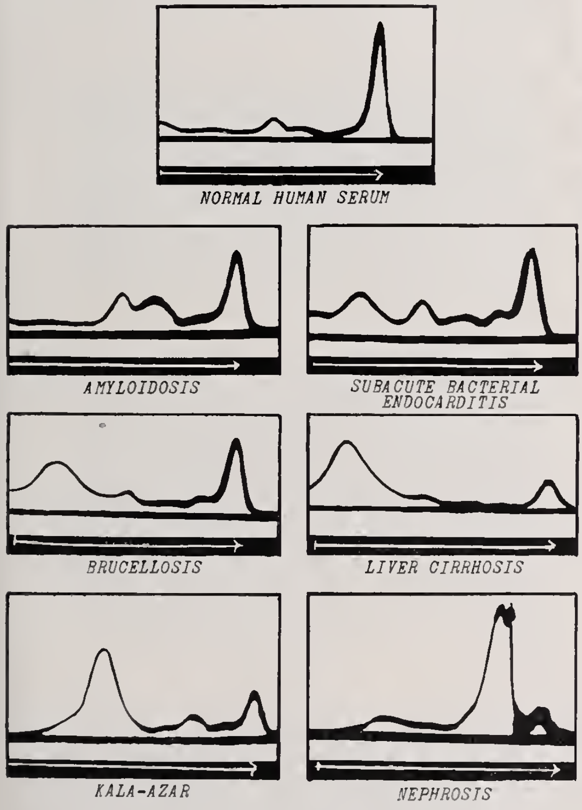
The following figures were obtained by statistical analysis of the experimental data[8] for a group of 60 "family" blood donors representing a cross-section of a mixed, adult, urbane population. The total protein was 7.22 ± 0.48 grams per 100 ml. of serum. The following figures are in terms of relative concentration: albumin, 56.8 ± 3.0 per cent; $alpha_1$-globulin, 7.2 ± 1.2 per cent; $alpha_2$-globulin, 8.7 ± 1.5 per cent; beta-globulin, 12.8 ± 2.3 per cent, and gamma-globulin, 14.4 ± 2.4 per cent; the albumin-globulin ratio was 1.33 ± 0.18 per cent.

The electrophoretic diagram of blood serum and plasma reflects the physiologic state of the individual as a whole rather than representing a specific pattern corresponding to a specific disease with the exception of Milroy's disease, certain types of multiple myeloma, nephrosis, and disseminated lupus erythematosus.

Milroy's disease or *hypogammaglobulinemia.* This is a rare condition in which the patient has a low total protein with almost complete absence of gamma-globulin and with edema as the only symptom. Schick and Greenbaum[9] have followed a patient since birth for 20 years. Surprisingly she showed a complete lack of childhood infectious diseases. The diagnosis was not made until she was 12 years old, and an electrophoretic pattern of her serum showed practically no gamma-globulin. She has been followed for 8 years since then, but there is only a temporary change in the protein pattern when she is given albumin, gamma-globulin, antiserum, or ACTH.

Her total serum protein has varied between 4 and 5 Gm. in 100 ml. of serum, while her gamma-globulin has never risen much higher than 0.3 Gm.

Nephrosis. This disease shows a highly atypical serum pattern with an extremely low albumin and gamma-globulin content and an electrophoretic component migrating in the alpha and beta globulin regions with a concentration comparable to that of albumin in normal serum (figure 2). The urine of such patients yields an electrophoretic pattern closely resembling that of normal serum and thus representing a striking contrast to the serum of the same individual. This indicates that the excretion of urinary protein by the kidney is a highly selective process rather than a simple filtration.


NORMAL HUMAN SERUM

AMYLOIDOSIS

SUBACUTE BACTERIAL ENDOCARDITIS

BRUCELLOSIS

LIVER CIRRHOSIS

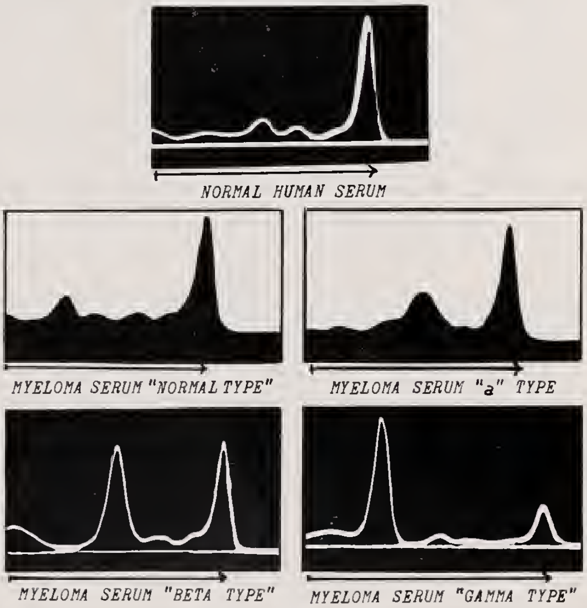
KALA-AZAR

NEPHROSIS

FIG. 2. Serum protein patterns in various types of disease. Ascending boundaries, barbiturate buffer, pH 8.6.

Ether extraction of a nephrotic serum causes a drastic reduction of the β-component peak which suggests that the increase in that region is due to a lipoprotein. It is conceivable that the very low albumin concentration may be due to an excessive loss of this protein through the kidney.

Multiple myeloma. This is one of the most challenging diseases for the protein chemist and also one of the most baffling, since 4 different patterns may be observed in different patients, pseudonormal as well as those patterns containing an abnormal protein fraction in the alpha, beta or gamma regions, and which may or may not correspond to the Bence-Jones protein excreted in the urine of some of these patients. There seems to be no correlation between the clinical state of the paient, the type of electrophoretic pattern, the excretion of Bence-Jones protein in the urine, inclusion bodies, sedimentation rate, nor any specific changes in the blood chemistry.[10] (See figure 3 for various types of protein patterns in multiple myeloma.) The anomalous protein in the beta region shows considerable variation in mobility outside of the limits of normal beta-globulin. It has been


NORMAL HUMAN SERUM

MYELOMA SERUM "NORMAL TYPE"

MYELOMA SERUM "a" TYPE

MYELOMA SERUM "BETA TYPE"

MYELOMA SERUM "GAMMA TYPE"

FIG. 3. Serum protein patterns from patients with multiple myeloma.

suggested[11] that this material is identical with Bence-Jones protein on the basis of model electrophoresis experiments as well as in the ultracentrifuge. Other investigators[12] found that the material with gamma mobility is neither identical with Bence-Jones protein nor with mixed gamma-globulin in spite of similar mobility and sedimentation constants. It differs from the normal gamma-globulin by its high electrophoretic homogeneity and amino acid composition as determined by paper chromatography.

In a series of 91 cases studied[10] approximately 22 per cent were of the pseudonormal type, 6.6 per cent of the alpha-globulin type, 15.4 per cent of the beta-globulin type, and 54.9 per cent of the gamma type. The last has also been found to be the most frequently occurring type by other investigators.

Disseminated lupus erythematosus. Although the total protein content of the sera is generally within normal limits in this condition, the albumin concentration is decreased; the alpha$_2$ and gamma-globulin are increased, while the alpha$_1$ and beta-globulin fractions remain in the normal range.[13] This causes a reversal of the A/G ratio.

The gamma-globulin may be increased by 50 per cent of the total protein content. Usually hypergammaglobulinemia is encountered either in infectious diseases or in some involvement of the liver, e.g., cirrhosis. As the condition of the patient improves temporarily either under treatment or during a spontaneous remission of the disease the amount of gamma-globulin will decrease and the albumin will increase. While the alpha$_1$-globulin concentration is normal, the alpha$_2$-globulin content is increased to twice the normal amount. This fraction during remission or after treatment very rarely returns to normal values.

The sera of 5 patients were studied before therapy with cortisone and adrenocorticotropin (ACTH). After a clinical remission had been produced by these agents it was found that the albumin and gamma-globulin components tended to return toward normal levels while the alpha$_2$-globulin fraction remained unchanged (figure 4).

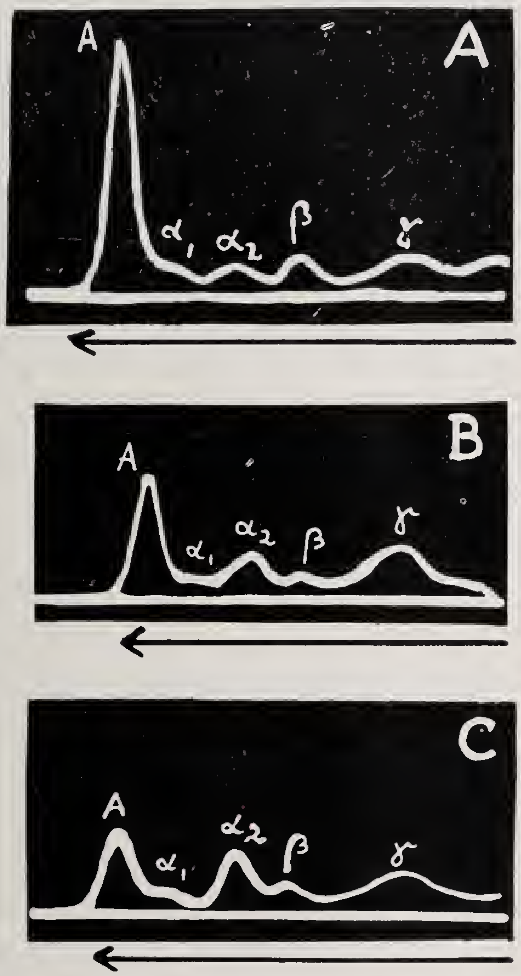
There are many diseases which do not show specific patterns but fall into general types. Thus, tuberculosis and pneumonia as well as other febrile and tissue-wasting diseases show an increase in the alpha-globulin fraction. The albumin is reduced to a variable extent, and the fibrinogen and gamma-globulin are found to be increased in active cases of tuberculosis.

Hodgkin's disease. The electrophoretic serum protein diagrams were nonspecific but seemed to be correlated with the clinical state of the patient and thus were of prognostic value.[14] From pseudonormal patterns at the onset of the disease the patterns changed at intermediate stages to show greatly elevated gamma-globulin levels. In the terminal stage there was observed a relative decrease in the albumin, an inverted A/G ratio, and greatly enlarged alpha$_1$- and alpha$_2$-globulin components, which in some instances become the major protein fraction in the serum.

Infectious diseases in which antibodies are formed in response to specific antigens of bacterial or viral origin. The gamma-globulins are increased, although the large increase in this fraction can hardly be accounted for by the antibodies alone, since the actual amount of antibodies present has been found to be small. (See figure 2 for protein patterns in subacute bacterial endocarditis and brucellosis.)

Syphilitic sera showed an elevated gamma-globulin and a decreased albumin level, but the changes cannot be correlated with serologic activity. Kala-azar sera have not only a high total protein content but also a tremendous increase in the gamma-globulin fraction (figure 2).

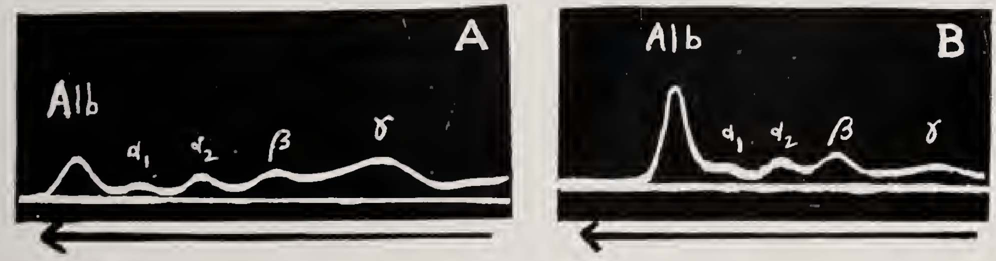
Liver disease. Since the liver seems directly involved in the synthesis of proteins and there is usually a change in the A/G ratio in practically all types of liver diseases, it has been of particular interest to study them electrophoretically (figure 2). A constant finding has been a decrease in serum albumin and an increase in some of the globulin fractions, most often the gamma-globulin and less frequently the beta-globulin fraction. Usually in a serum with increased beta-globulin the thymol turbidity test will be increased and a positive cephalin flocculation test will accompany a high gamma-globulin. The total protein content may be normal or increased with an inverted A/G ratio. The correlation between the chemical and electrophoretic data is not very close because of the alteration of the protein constituents during the disease. As the patient recovers the serum protein patterns return to normal.[15]



(FIGURE 4-a)

The beta-globulins, especially the beta-lipoprotein fraction, have attracted much attention during the last year since Gofman and his associates[16] have linked the presence of an ultracentrifugally separated macromolecular lipoprotein component to the incidence of atherosclerosis. This has given a tremendous impetus to lipoprotein studies by many other technics.

Another recent development is the study of sickle-cell anemia by Pauling and his group[17] in California, who found that the hemoglobin from sickle-cells has a different electrophoretic mobility than normal hemoglobin, hence it has been called a "molecular disease." The "anemic" hemoglobin molecule carries more positive charges than the normal hemoglobin molecule, and Pauling believes that the molecules are able to form a bond with other hemoglobin molecules, which leads to a distortion of the red blood cells. The normal red blood cell proteins had been studied previously[18] and were found to have 3 components of different electrophoretic mobility, one with a mobility of hemoglobin, one (α-component) slightly faster, and one (β-component) somewhat slower. These studies of hemoglobin and red blood cell proteins offer a new approach to the study of hemorrhagic diseases.[19]



(FIGURE 4-b)

FIG. 4. Studies of serum proteins from patients with disseminated lupus erythematosus. (4-a) Representative electrophoretic patterns of normal serum (A), and of 2 sera from patients with disseminated lupus erythematosus (B, C).

(4-b) Electrophoretic diagrams of the serum proteins of 1 patient with disseminated lupus erythematosus before (A) and after therapy with cortisone and ACTH (B).

Radioactive iodine and other tracer substances have been used successfully in combination with electrophoresis technics.[20] As an example, after the administration of I_{131} the blood serum of patients was fractionated in the electrophoresis apparatus and the various fractions were then tested for their specific radioactivity. It was shown that the albumin and gamma-globulin fractions are practically free of organically bound iodine, the largest concentration being in the $alpha_2$ and beta-globulin regions of the electrophoresis cell.

Proteins, particularly albumin, have been tagged with I_{131}, and the rate of disappearance and turnover have been studied in man and in the rabbit.[21]

The lymph, serous and pleural effusions, joint, eye, seminal and cerebrospinal fluids, pancreatic juice, milk proteins, and tissue extracts, from both normal and pathologic tissues of man and of a variety of animals, have been studied. Tuberculin, bacterial preparations, snake venoms, hormones and gland extracts, and enzyme preparations as well as nucleoproteins have been characterized by electrophoretic examination. Cohn and his group at Harvard have employed electrophoresis to control the chemical separation of the various plasma protein fractions, such as albumin, globulins, fibrin, hemoglobin, lipoproteins. thrombin, and isoagglutinins.

The first investigators in the medical field were apparently anxious to find a specific protein pattern for each disease. That this has not materialized except in a few instances is not surprising, since there exists such a multiplicity of symptoms of tissue and organ involvement in many syndromes. Electrophoresis probably will be found more useful in following the course of progressive protein changes during a disease rather than in its diagnosis. It should be looked upon primarily as an analytical tool of established value in quantitative studies of complex mixtures of colloids of biologic interest, particularly proteins.

SUMMARY

The application of electrophoresis to medicine has been discussed and its usefulness has been demonstrated in medical and biological fields. It is the most dependable means of analyzing the protein content of body fluids, which serve as an index of the physiologic state of the patient. Even though there may not be a specific pattern for each separate disease, significant alterations of the protein spectrum may be followed during the course of the disease, and thus it may be of prognostic if not diagnostic value.

In a few instances such as Milroy's disease, nephrosis, liver disease, disseminated lupus erythematosus and certain types of multiple myeloma, the protein pattern is distinctive and may be of direct diagnostic assistance.

The application of this physico-chemical technic has led to fresh approaches in problems of physiology and medicine which may change our former concepts and ultimately lead to a better understanding of normal and pathologic processes.

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(Continued on page 60)

CAUSES AND SIGNIFICANCE OF HOARSENESS*

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HOARSENESS may be defined as a rough discordant quality of the voice. It is so common an affliction that most of us have experienced it frequently and therefore its significance is often overlooked. One thinks of hoarseness primarily in terms of the common cold, but he must also consider the triumvirate which frequently affects the larynx: carcinoma lying in the anterior commissure, tuberculosis in the posterior commissure, and syphilis, the great imitator, present anywhere throughout the larynx.

Hoarseness is usually a manifestation of a local lesion. In normal phonation a column of air rises from the trachea through the larynx; here the cord edges break it into small puffs of air which are blown into the oral pharynx where articulation takes place. A clear voice depends upon smooth cords of equal tension and texture, since these determine the accurate formation of the individual "puffs." Changes in tension, texture, or regularity of the cord edges produce hoarseness. Inflammatory lesions cause a dampening of the vibrations of the cord edges. Neurologic lesions cause changes in tension of the cord edges. Mechanical lesions, such as tumors or foreign bodies lying between the cords, prevent accurate approximation and cause an air loss around the lesion which accounts for hoarseness.

Although a local lesion may be responsible for the change in the character of the voice, systemic disease not infrequently influences the condition of the cords. Nephritis, for example, can cause laryngeal edema; diphtheria is a systemic disease, although the acute inflammation of the larynx together with the membrane are local manifestations. Mediastinal tumors may cause changes through vascular engorgement and paralysis of a vocal cord. Neurogenic disease such as amyotrophic lateral sclerosis may influence the character of the voice through paralyses or pareses. Tuberculosis may cause voice changes due to indirect action of the systemic disease on the larynx or through local changes.

The various causes of hoarseness may be discussed as they affect different age groups. Changes in the cry, or the absence of the cry, in the newborn infant makes one suspect the presence of a congenital anomaly. Such lesions as congenital laryngeal webs, cysts, or paralyses must be considered. The common congenital laryngeal stridor with a soft flaccid larynx on occasion may be associated with marked hoarseness. Paralyses of the larynx in newborns may be central or peripheral in origin, due to brainstem lesions or to various cardiovascular anomalies which involve the left recurrent laryngeal nerve. Birth injuries due to a central hematoma may be responsible for vocal cord paralysis in the newborn infant. In the newborn group one also has to consider the possibility of catheterization edema of the larynx which may follow repeated attempts to catheterize the larynx for the aspiration of secretions from the tracheobronchial tree. Such repeated attempts are dangerous, since the edema produced may be sufficient to cause acute respiratory obstruction in addition to hoarseness.

In children the commonest cause of hoarseness is laryngitis associated with upper respiratory infections. The history is usually sufficient to establish the diagnosis; not infrequently the infection continues throughout the respiratory tract to give the typical picture of acute or chronic laryngotracheobronchitis. Diphtheria must always be considered in children who have an acute respiratory infection associated at the onset with hoarseness.

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* Address delivered before the Twenty-second Annual Scientific Assembly of the Medical Society of the District of Columbia, October 2, 1951.

Chronic laryngitis may have as its basis sinusitis or bronchiectasis with the entire respiratory tract subject to the changes of chronic inflammation. The commonest cause of chronic hoarseness in children is screamer's nodes, the small nodules on the edges of the vocal cords at the junction between the anterior one third and posterior two thirds of the cords which develop as a result of vocal abuse. These may be of such long standing that the family becomes accustomed to the character of the child's voice, and only during episodes of acute infection does the hoarseness increase in severity to cause the family to seek advice. One is at a loss to determine how to treat a child with screamer's nodes, since in his active play he must use and abuse his voice without constant parental discipline. If the nodules are large they may be removed under direct laryngoscopy; if they are small, voice training may improve the quality of the voice, but this is not always possible in a growing, healthy, active child. Surgical removal of the nodules will result in only temporary improvement if voice correction therapy is not instituted, and the nodules will recur when the child returns to his previous habits of play and vocal activity. These nodes tend to disappear spontaneously during puberty, since the larynx grows rapidly and stress is placed on other parts of it than those affected before this rapid growth. Then, too, the child is more mature and somewhat more guarded in the use of his voice unless he engages in such activity as cheerleading.

Papilloma must be mentioned as a fairly frequent cause of hoarseness in children. Such hoarseness is slowly progressive and begins with a cough and slight hoarseness only to increase and then gradually to be associated with respiratory difficulty. The management of such children consists of endoscopic removal of papilloma at frequent intervals with or without a tracheotomy, depending upon how much papilloma is present. X-ray therapy of papilloma of the larynx in children is to be strictly avoided since it results in destroying the growth properties of the laryngeal cartilages and therefore in chronic laryngeal stenosis. Aureomycin seems to decrease the frequency of recurrence in some of the children.

In the adult carcinoma of the larynx is the first consideration in patients who are hoarse, and every diagnostic means has been used to eliminate this lesion from the many causes to be considered. Of the inflammatory diseases causing hoarseness in adults, acute laryngitis of bacterial origin as well as acute laryngitis of traumatic origin due to vocal abuse or excessive smoking must be considered as most common. Acute laryngitis of an inflammatory character secondary to a common cold is as frequent in adults as it is in children. Secondary laryngitis or chronic laryngitis may have as its basis sinus infection, bronchopulmonary disease or postnasal suppuration. Chronic laryngitis due to vocal abuse seen in hucksters, preachers and salesmen is generally uniform in character and as such forms a distinct clinical entity. It consists of an ulceration and later a perichondritis of the vocal processes of the arytenoids. Finally, a granuloma develops on the phonating edge of the arytenoid and the opposite cord begins to show similar signs of irritation and develops a deep ulcer at the point of contact with the granuloma on the original side. The management is difficult because it necessitates strict voice rest for a considerable period of time. However, these patients are usually reluctant to follow this type of régime since their livelihood depends upon vocal function. Voice correction therapy is essential for the ultimate disappearance of the lesion. Contact ulcers may develop in patients who continue talking in spite of an acute respiratory infection; the ulcer develops because of the action of the arytenoids against each other in the attempt to overcome the dampening of the vibrations caused by the inflammatory changes of the cords. Thus, it is important for all patients who develop laryngitis to rest the voice by eliminating all unnecessary talking.

Another type of lesion which may be considered due to voice trauma is that of the singer who abuses his voice and develops nodules at the junction between the anterior one third and posterior two thirds of the cords. Such lesions occurring in singers require strict voice rest and then gradual reëducation. If the nodules become large they may be removed endoscopically, but unless the singer learns more satisfactory voice technics they will recur.

Specific infections such as tuberculosis affect the larynx and cause hoarseness. They are detected by the sputum examination and the X-ray films of the chest. Yet these simple diagnostic procedures are too often overlooked when they should be routine for every patient who has a voice change. Streptomycin and PAS have spelled a new chapter in the treatment of this condition.

Paralyses of the larynx produce hoarseness by changing the tension of one or both vocal cords and make it impossible for the patient to control the action of the cords as they attempt to break up the air column ascending from the chest. In unilateral paralysis one flaccid and one tense cord cause an air loss which accounts for the breathless type of whisper characteristic of this condition. In bilateral paralysis the cords lie in the midline, and although they are flaccid they are equally so and consequently the patient with the bilateral paralysis of the larynx has an almost normal voice while the patient with the unilateral paralysis is hoarse or aphonic. Failure of the function of abduction in bilateral paralysis causes the severe dyspnea characteristic of this condition, and a tracheotomy is necessary in most cases. The causes of unilateral paralysis may be listed by following the course of the nerve from the base of the skull, through the neck, under the subclavian vessels on the right, touching the apex of the lung, returning along the esophagus through the thyroid gland and into the larynx. The course of the left recurrent laryngeal nerve differs since it passes into the chest and under the arch of the aorta. Thus, lesions of the chest as well as the neck may cause a paralysis of the left cord, whereas only the lesions in the neck or the apex of the right lung will be responsible for lesions of the right cord. The complicated course of the recurrent laryngeal nerve, particularly on the left, makes paralysis of the cords an index of pulmonary disease and therefore valuable in diagnosis and prognosis.

Functional dysphonia due to psychic disturbances manifests itself in a number of ways, of which hoarseness is often a very prominent sign. The mirror examination may show the larynx to be normal except for a small air loss posteriorly as the cords fail to approximate in the posterior third. In such instances the patient has a whispered type of voice. In other manifestations of this condition the patient speaks with extreme tension and fixation of the diaphragm in a pattern which is so characteristic that it may be detected at the moment the patient starts to talk. This pattern is broken in the sentences or parts of sentences that follow laughing, and this characteristic is recognized readily by the patient and his family. The management of such a patient is left to the psychiatrist or the speech correction therapist, the two often working together to restore a normal voice.

Neoplasms of the larynx, both benign and malignant, cause hoarseness because of the mechanical block between the vocal cords that prevents their approximation. Benign lesions, such as polyps, edematous, sessile polypoid changes along the cords, and solitary papillomas can be removed endoscopically under local anesthesia to restore a clear voice in a matter of minutes. Malignant neoplasms, on the other hand, require more careful study in order to help the surgeon choose a method of therapy which will give the patient the best opportunity for his life.

A large majority of malignant neoplasms in the larynx are squamous cell carcinomas on the vocal cords themselves. They give an early warning to the patient, the family, and the physician when the voice change has taken place, and if the warning is heeded, an early accurate diagnosis can be made. Early cancer of the larynx is almost as curable as early cancer of the skin. Rehabilitation to restore a serviceable voice following minimal procedures, such as resection of one vocal cord, or of reëducation of the patient following the more radical procedures, is now such general practice that most patients, even if the entire larynx is removed, return to their original occupation after their convalescence and voice training program have been completed. Cancer of the larynx in younger individuals is being seen more and more frequently and, therefore, must be suspected in a patient of almost any age who is persistently, progressively hoarse. Cancer of the larynx is extremely common and this symptom should always be considered in the light of early carcinoma and every possible diagnostic means used to detect its presence or to eliminate it from further consideration.

The diagnostic steps used to detect the causes of hoarseness are simple and are neither time-consuming nor costly to the patient. They must be made with care and accuracy and with the utmost honesty and sincerity of the physician with himself, to the end that every portion of the larynx is adequately and thoroughly inspected during the examination. History of external trauma, of vocal abuse, of onsets of hoarseness while shouting, of foreign body aspirations, etc., is significant. In children the history should include whether or not the child has had immunization for diphtheria, and in acute infections in an adult this question should also be asked and the answer recorded. The history of persistent, progressive hoarseness makes one consider first and foremost the possibility of a laryngeal carcinoma. Laboratory studies include the routine blood tests, the X-ray films of the chest, and the sputum examination.

The actual examination of the patient includes a most careful mirror examination of the larynx. With practice and with a certain degree of caution the larynx may be inspected with a laryngeal mirror in most patients without the use of a local anesthetic. However, should gagging be excessive, a local anesthetic sprayed into the pharynx may be used to facilitate this examination.

The examination should never be considered completed until the anterior commissure is adequately inspected. In children and infants, as well as in adults in whom even the addition of local anesthesia is not sufficient to make mirror examination of the larynx possible, a direct examination of the larynx should be made and tissue removed for biopsy for a final, accurate pathologic diagnosis.

Thus, hoarseness is usually due to pathologic processes involving the vocal cords. It may be due to inflammatory, neurologic or neoplastic disease. Careful study of the patient and particularly thorough inspection of all the cord surfaces by mirror or direct examination will establish the tentative diagnosis in most cases. Final diagnosis includes the laboratory examinations, particularly the biopsy. Therapy is dependent upon diagnosis, but the preservation of life and the restoration of voice are the final objectives to be reached, the latter never at the expense of the former.

"THAT FULL FEELING"

WILLIAM TRAVIS GIBB, JR., M.D.
Washington

THERE are many symptoms associated with disturbances of the gastrointestinal tract that are extremely common yet are difficult to explain from a physiologic point of view. They are usually part of a functional disturbance and clear up when the patient as a whole is made better. One of the most interesting of these is the complaint of feeling hungry prior to a meal and then, after taking a few bites, being satiated and having a sensation of distention in the epigastrium. All interest is subsequently lost in the further consumption of the meal. This does not happen every time the patient sits down to eat but usually occurs when there is some sort of emotional tension at mealtime, and it does not happen when the individual is diverted.

A small portion only of the patients with this complaint have organic disease of the stomach which limits its capacity, and the explanation is quite simple. A large gastric neoplasm and advanced linitis plastica are good illustrations. The individual who has undergone an extensive gastric resection will suffer this way postoperatively for a time, and in some cases the complaint will continue indefinitely. However, the vast majority with this complaint show no evidence of organic disease, and the assumption is rightly made that it is functional in origin and part of a neurosis. Although this statement is true, it does not explain the symptom. In order to treat a symptom properly there must be some explanation of the mechanism involved. Functional complaints are as a rule subjective and therefore almost impossible to reproduce in the experimental animal. The study of a human subject is unsatisfactory from a purely objective viewpoint, because the particular symptom cannot be consistently reproduced. Therefore, any explanation must be in great part hypothetical, based on scattered observations and impressions. Such is the case in this particular instance.

It must be emphasized first that the stomach is not a flaccid bag, nor can it be likened to an elastic rubber container. Its walls contain two layers of muscle laid down in a very complicated fashion. These muscle layers exhibit varying degrees of tone and activity. All parts do not react simultaneously to the same degree. The tone may vary from one part to another, depending upon what is going on. There is active relaxation and contraction, not just stretching and rebound. When the stomach is entirely empty the walls are in apposition and there is little or no actual lumen space. The walls are thicker because the muscle fibers are shortened. The surface area of the muscular portion is less than when it is full. The surface area of the mucosal layer is the same, however, and is compensated for by the rugae which become higher and thicker, with the intervening valleys obliterated. Most of this goes on in the body of the stomach, and the fundus seems to show less tonicity. This can be noted by means of the gastroscope before much air has been introduced.

The empty stomach of the hibernating bear, for instance, is extremely small and is said to be "shrunken," suggesting that there has been an actual loss of substance. When the animal starts eating in the spring, he begins with very small amounts of food and in a short time is eating in his normal way. This is due to a gradual relaxing of the increased tonus of the stomach, not to the regeneration of muscle tissue. I am sure that his hibernating stomach has exactly the same number of muscle fibers as when he is eating his usual diet.

When one examines the normal stomach radiologically while the patient is in the upright position, it is usually noted that the first swallow or so remains in the fundus for a short time before dropping to the most dependent portion of the greater curvature. Thereafter the remaining portion of the meal flows in readily. This suggests that the tonus of the body of the stomach is different from that of the fundus when it is empty, and that food in the fundus in some way causes the walls of the body to relax. I do not feel that it is just the weight of the barium in the fundus that accomplishes this. In certain instances the barium remains in the fundus for a considerable length of time and the patient complains of feeling full and will not drink any more barium until the body relaxes and the fundus is empty. Thereafter he ingests the rest of the meal without any complaint.

It has been my experience over a period of years that those patients who complain of the previously mentioned full feeling after a few bites show this sort of a reaction to a marked degree. In other words, the tonus of the body of the stomach is excessive, and this part does not relax normally when food enters the fundus. The food remains in the fundus for some time and slightly distends that part of the stomach, thereby doing away with the feeling of hunger. In other words, at that particular time the stomach, or rather that part of it which is ready to receive food, is actually full. The appearance presented should not be confused with a true cascade stomach. Probably many reported cascade stomachs are based on this mechanism and are not a true anatomic abnormality. When such a patient is behind the fluoroscopic screen and after taking a few swallows claims she can take no more, the roentgenologist by means of a soothing and reassuring approach can cause the body of the stomach to relax and the examination can proceed in the usual way.

The case which brought the idea of this mechanism to my attention came under my care many years ago. The lady in question was about 55 years of age and had been a friend of my family for many years. She was undernourished and high-strung and was famous in her social circle because of her "tiny stomach." Her friends were convinced that she had a bird-sized stomach, and she ate accordingly. Finally it was necessary to examine this phenomenon radiologically. Actually her stomach was enormous; the most dependent portion rested on her bladder when she was in the upright position. Initially, however, the first swallow remained in the fundus indefinitely, until finally after much conversation and diversion the barium dropped down.

Although there is no scientific proof as such, the origin of this mechanism is probably central, a selective vagal effect, and not in the stomach itself. There is a possibility that there might be a humoral mechanism working through the hypothalamus, the pituitary and the adrenals. In general the patients are thin and undernourished, tense and neurotic, and have long, fishhook types of stomach. They frequently have curious ideas of what they can and what they cannot eat. The whole thing stems from a psychologic reaction, and there are probably many such causes. Long years of unsupervised dieting in order to maintain an overly slim figure may contribute in many instances.

The treatment of this symptom consists of treating the patient as a whole. Although this may be the chief complaint, there are many other symptoms as well. The personality of the patient must be thoroughly evaluated, and this can usually be accomplished by the average physician. The specialized services of a psychiatrist need not be employed necessarily. Sometimes a demonstration in the fluoroscopic room, with a mirror being used so that the patient can see that her stomach is perfectly well able to hold any reasonable amount of food, will suffice. Sometimes there is excessive swallowing of air with food and drink, and this also can be shown to the patient radiographically. Many of these people make a great commotion about the ingestion of food, taking tiny sips of liquid and minute bites of solid food, and swallowing each time with great effort and apparent difficulty. Probably, if the truth were known, they could eat as much as they wanted

(*Continued on page 60*)

FAMILIAL PATTERN IN PEPTIC ULCER

Report of a Family and Review of the Literature*

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A FAMILIAL pattern of peptic ulcer obtained from one family prompted us to investigate the individual cases and to review the literature briefly.

REPORT OF CASES

The Father. At the age of 34 he developed epigastric distress between meals which was relieved by means of food and alkali. X-ray examination at this time revealed a duodenal ulcer. One year later he was hospitalized because of a bleeding duodenal ulcer. On a regimen of bland diet and antacids he remained asymptomatic during the following 8 years. The ulcer perforated when he was 43 and required surgical repair. In the ensuing 9 years he has had occasional episodes of heartburn and epigastric distress which are readily controlled by diet and Amphogel.

Son No. 1. He first noted gnawing epigastric discomfort relieved by eating at the age of 20. One year later, X-ray examination in the Navy revealed a duodenal ulcer, because of which he received a medical discharge. Repeated radiographic examinations during the following 6 years have shown the presence of a chronic duodenal scar. At present infrequent attacks of epigastric pain are promptly relieved by the use of antacids.

Son No. 2. He underwent surgical repair of a perforated duodenal ulcer without a previous ulcer history at the age of 18. Follow-up roentgenographic studies during the next 6 years have revealed a chronic duodenal ulcer. Symptoms, including epigastric distress radiating through to his back, are rapidly controlled by adherence to an ulcer diet in association with the use of antacids and antispasmodics.

Son No. 3. Epigastric pain between meals appeared at the age of 20. This member has never had a gastrointestinal X-ray examination, but his symptoms are recurrent and he requires treatment with a bland diet and antacids in order to obtain relief.

Daughter No. 1. At the age of 28 she had epigastric distress between meals and at night, which was relieved by food or antacids. X-ray examinations were never obtained, but the symptoms are well controlled by the use of a bland diet and antacid administration.

DISCUSSION

Many clinicians have been impressed by a familial pattern in diseases of the gastrointestinal tract. This could be caused by some factor or factors in the common environment of such a family group, or perhaps by an hereditary element. It is possible that both factors must coexist for the formation of an ulcer. No substantial evidence has been presented to support either of these theories. Dreschfeld[1] in 1897 described 6 families, each of which had 2 members with peptic ulcers. Another group, comprised of a mother and 3 sons with duodenal ulcers and a fourth son with a gastric ulcer, was reported by Huddy[2] in 1925. A family was mentioned by Bockus[3] in which a father, 4 sons, and 1 daughter were treated for peptic ulcer. Similar reports have been published by others.[4-9] Some of these authors are not specific as to whether the location of the lesion was duodenal or gastric. Several such cases were diagnosed from the history alone without the benefit of confirmation by roentgenographic studies. There are reports of twins, both monozygotic and dizygotic,[10–13] who developed peptic ulcers at a similar period in life. Several authors have speculated as to the mechanism of heredity involved in this familial incidence of peptic ulcer. Reich[14] described a family with 5 cases of gastric ulcer in 4 generations. He felt that it was a dominant factor which was not sex-linked. Others[15] have called it "an irregular dominant factor more frequent in males." On the other hand, Bauer and Aschner[16] considered the factor for ulcer to be a recessive one.

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In the family reported here, the father, 3 sons, and 1 daughter were involved. Another son and daughter, the youngest members of the family, have no known gastrointestinal dysfunction. The remainder of the family history, so far as could be elicited, was also negative for peptic ulcer.

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PERFORATION OF A FISH BONE THROUGH THE DUODENUM INTO THE PORTAL VEIN RESULTING IN STREPTOCOCCUS SEPTICEMIA AND DEATH

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Report of Case

B. C. S., a 24-year-old colored man, walked into the hospital clinic giving a history of chills, fever, nonproductive cough and malaise for 24 hours. The past history was essentially negative except for intermittent attacks of diarrhea since the age of 10, with 3 to 4 watery stools daily during an attack. The stools contained no gross blood. Approximately a month before this admission he was seized with severe periumbilical pain which radiated to his back. He sought medical aid and was admitted to a hospital in another city. The physician who treated him could not be contacted, but according to the records he did not consider the patient seriously ill, since nothing of significance was found on physical examination and the white blood cell count and differential white blood cell count were within normal limits. He was discharged after 24 hours of observation. The patient stated that after discharge he continued experiencing vague, epigastric abdominal pains radiating to his back.

Physical examination on admission revealed a well-developed colored man who appeared acutely ill although he walked into the hospital. The temperature was 104.2°F., the pulse rate 108, and the respiratory rate 24. Examination of the abdomen revealed moderate tenderness over the entire upper portion with only slight muscle spasm. The white blood cell count was 18,400, with 92 per cent polymorphonuclears, 5 per cent lymphocytes, and 3 per cent monocytes; of the polymorphonuclears, 60 per cent were segmented, 29 per cent were stab cells, 2 per cent were juveniles, and 1 per cent were myelocytes

The next morning the temperature fell to normal, but thereafter it began to spike with evening rises of temperature to 102°–103°F., accompanied by severe shaking chills. The possibility of malaria was thought of, but blood smears were negative. Three days after admission the abdominal pain became more severe and increasing rigidity of his upper abdominal muscles developed, especially on the right. Because of these findings we deemed it advisable to perform a laparotomy, having in mind the possibility of acute cholecystitis. At this time a blood culture had been taken, but the results had not been reported. At operation the gall bladder was reddened and slightly distended. Cholecystotomy was performed, and the patient was returned to his room in poor condition.

The blood culture was reported on the day following surgery as being positive for *Streptococcus hemolyticus*. The patient was given extensive antibiotic therapy and small blood transfusions. Despite this therapy the blood cultures remained positive and a portion of the liver eviscerated a week postoperatively. Some jaundice appeared at this time and gradually increased in intensity. The course was downhill, and death occurred 28 days after admission.

At necropsy the peritoneal cavity was found to contain about 2 liters of yellowish, clear fluid. The mesentery contained a number of soft, enlarged, discrete lymph nodes. There was marked elevation of the diaphragm. The liver was greatly enlarged, extending below the costal margin for 6 to 8 cm. The spleen weighed 760 grams with a smooth capsule and regular outline. On section the pulp was seen to be soft and dark purple, and to have indistinct trabeculae. The pulp scraped away as gelatinous, clot-like masses. To the naked eye, the entire duodenal mucosa appeared intact and there was no evidence of scarring. The structure was adherent, however, posteriorly to the portal triad almost throughout their point of contact. The liver weighed 3,465 grams. There were a number of firm adhesions between the medial extremity of the right lobe and the abdominal wound. The surface was otherwise smooth, and the margins were sharp. Near the lateral margin of the left lobe was an elevated area 4 cm. in diameter with slight irregularity of the surface because of the projection of innumerable, yellowish, pus-filled lacunae ranging from 0.2 to 1 cm. in diameter. Section through remaining portions of the liver disclosed hundreds of similar collections of small abscesses throughout the substance. Branches of the portal vein could be traced in most of these. Even where there were no abscesses the portal radicles were prominent with their walls greatly thickened. On section into the portal vein where it entered the liver and before division, an abscess-like cavity about 2 cm. in diameter proved to be a friable thrombus adherent to a thickened vein wall, the remaining space being occupied by fluid pus. Embedded in the clot was a needle-like structure 3 cm. in length and about 0.1 cm. in diameter with the characteristic curve, consistency, and appearance of a fish bone. This body had part of its length within the vein lumen and part embedded in the posterior wall.

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President's Page

SOCIETY AND THE PHYSICIAN

VII. Professional Courtesy

The courtesy of treating other physicians and their families without charge is well accepted and often is extended to nurses, dentists, druggists, and others with whom we have professional contact. With the custom I have no quarrel and have often been the recipient as well as donor of such courtesy. However, I did not have such courtesy in mind when writing this page.

I'm thinking in terms of the more generally accepted definition of "courtesy" and how it applies to the medical profession. How courteous are our relations with our patients, our nurses, our hospital personnel, and with our fellow physicians?

I recall surgeons who have the unfortunate habit of throwing instruments when they aren't doing well, of swearing loud and long when they're annoyed, of blaming nurses, residents and orderlies when they get into difficulties. They are "never wrong themselves." Someone else is always at fault. Such lack of consideration and courtesy is soon mirrored in the attitude of those who have to work with them. Lack of cordiality, grudging service, and avoidance are their harvest.

The commonest complaint patients make about doctors isn't that they charge too much or don't render good medical care, but that the doctor never tells them anything. We all know that some patients talk endlessly, others don't absorb what we tell them, and others yet put an unintended interpretation on what we have to say. In spite of this, I believe the most satisfied and coöperative patient is the one who has been offered the courtesy of explaining his or her trouble, and in turn has received a reasonable explanation of what's wrong, what is going to be done about it, and what can be expected from the treatment.

Unwittingly, physicians are often discourteous to other physicians and this at times creates problems for both. All too often when a patient goes to another physician for reassurance or another opinion, the question is abruptly asked, "Who in the world put bifocals on you?" or, "Who used radium on this lesion?" or, "Why would anyone suggest surgery for what you have?" These thoughtless and seemingly innocent questions cast doubt on the integrity and intelligence of the other physician, undermine the patient's confidence in the medical profession (and you), and at times pave the way for a lawsuit which could readily have been avoided. While it is neither honest nor wise to cover up for intentional misdeeds of others, the courteous understanding of the other physician's viewpoint is essential to good public and professional relations.

Editorials

HSA—A TRIED AND PROVEN AGENCY

EDITOR'S NOTE: The following article, written for the MEDICAL ANNALS, constitutes a farewell message from the late Dr. Oscar B. Hunter, Sr. Completed only a few hours before his death, it is written with the vigor and frankness which characterized everything he did. In it he counsels wisely on a matter which was close to him and which is of vital concern to the medical profession and the people of this community.

Some years ago physicians in this community found that they were giving their services free to ward patients in the hospitals who should be paying not only for hospitalization but for medical care. This was true to such an extent that many physicians refused to contribute to the Community Chest. Through the Committee on Medical Economics of the Medical Society, the situation was brought to the attention of the Community Chest, which moved to establish a central admitting bureau through which all medically indigent patients would be cleared. Under this plan Community Chest money was used to pay the hospital and the patient repaid over a period of time to the extent possible. Once physicians were assured that a patient was medically indigent and worthy to receive Community Chest assistance in paying the hospital, they were willing to give their professional services without fee. The Medical Society contributed nearly $10,000, which was used with money allocated by the Washington Community Chest, to establish a Central Admitting Bureau which began to function on January 1, 1935. This Central Bureau, now known as the Hospital Service Agency, is a nonprofit corporation on which there is equal representation of the medical and dental professions, the hospitals, and the contributing public which supports the Community Chest.

Since 1935, Community Chests have been established in the nearby counties of Maryland and Virginia. These chests have jointly established the Community Chest Federation, which annually conducts the Red Feather campaign. This campaign supports all of the Community Chests and their member agencies. The Red Feather campaign recently completed raised more money than in any year since the end of World War II. In this campaign the solicitation of physicians was organized under the leadership of one of our own members, Dr. W. Ross Morris. The Medical Society takes pride in the fact that the physicians have exceeded their quota in the campaign.

With the growth of population in the Metropolitan Area, the Hospital Service Agency has expanded its activities so far as deemed necessary by its Board of Trustees to investigate the circumstances of medically indigent patients in the District of Columbia and nearby counties, and to certify their worthiness to receive financial assistance. Totally indigent persons, if legal residents of the community, can be hospitalized at tax expense.

In developing its functions under policies established by its representative Board of Trustees, Hospital Service Agency has steadfastly adhered to the principle that the medically indigent patient should pay for his own care to the extent possible and receive assistance only to the extent necessary. The application of this principle has resulted in collections from part-pay patients sufficient not only to cover the cost of HSA's own administration but to add substantially to the hospitalization fund allocated by the Community Chest. The use of contributed (Community Chest) funds to help the medically

MEDICAL LEADERS IN THE RED FEATHER CAMPAIGN

Dr. Frank D. Costenbader, President of the Medical Society of the District of Columbia, and Dr. W. Ross Morris, Chairman of the Physicians Group, are shown discussing the opening of the 1952 Red Feather Campaign of the United Community Services with the Campaign Chairman, Mr. Thornton W. Owen. This picture was taken in front of the Hospital Service Agency booth at the Medical Society's 22nd Annual Scientific Assembly. HSA is a Community Chest agency.

The Physicians Group contributed more than 114 per cent of its quota in the Red Feather Campaign. Most of the credit for this success is due Dr. Morris, who was tireless in his efforts to "top" the doctors' quota.

indigent at the time of need, with ultimate repayment by the patient, has always been considered one of the most approved and worthwhile aspects of HSA's plan of operation.

About a year ago one of the county Community Chests withdrew from its affiliation with the Hospital Service Agency and set up its own plan for investigating medical indigency and paying for hospitalization with free medical care by physicians. That Community Chest is now appealing to its county government to take over responsibility for providing hospital care to *all patients* unable to pay. At present the county governments provide care for tax-eligible patients either through HSA or by formal contracts with voluntary hospitals, most of which are, of course, in the District of Columbia. The District Government as far as possible provides hospital care for tax-eligible patients at Gallinger Municipal Hospital. It has contracts, however, with eight local hospitals to care for emergency admissions and outpatient care. These contract hospitals are paid from a fund known as the Medical Charities Fund appropriated by Congress in the annual appropriation for the District of Columbia. The District Health Department administers this fund through its Bureau of Medical Assistance, which, like the Hospital Service Agency, arranges accounts receivable from patients able to pay. Payments from tax-eligible patients, however, are made to the Collector of Taxes and go into the general funds of the U. S. Treasury, thus becoming unavailable for any addition to the Medical Charities Fund. As stated above, payments by HSA-certified patients are added to the Hospitalization Fund provided through the Red Feather campaign.

The District of Columbia Community Chest, now known as United Community Services, has decided to allocate its own fund for hospitalization of nontax-eligible patients instead of having it allocated for them by the Community Chest Federation as in the past. As of this writing, UCS is considering, through its Hospitalization Committee, whether to have its hospitalization fund continue to be administered by HSA, originally established by the Community Chest and the Medical Society, or to have it administered by some other agency, central or otherwise.

The Medical Society will watch with interest the progress of the UCS in arriving at its decision. We have found during the seventeen years of its existence that HSA has adapted its functions to the changing needs of the community. It has taken on additional activities not met by any other agency and it has discontinued some of its original activities when they were found no longer necessary or when it was found the need for them was being met by other agencies. Physicians have demonstrated their willingness to coöperate with the local and with other Community Chests in providing hospital care for nontax-eligible medically indigent persons, but they will regard with apprehension any move to shift from a tried and proven agency to an untried new agency the responsibility for administering Red Feather Funds which they have helped to raise and which have been allocated for hospitalization of patients which they are expected to serve without fee.

Oscar B. Hunter, Sr., M.D.

NEW HOPE FOR HEARTS

Recently the Medical Society of the District of Columbia was told in an interesting discussion by Dr. Paul D. White of Boston that the "good old days" were not so very good. He recalled that 40 years ago diagnosis in the field of heart and vascular disease was faulty by present-day standards, and that treatment was poor. He told of the continuing need and, in some age groups, increasing problem of these diseases which far outstrip all others as a cause of death. However, he pointed out definite advances in treatment that have taken place in the past 2 decades. To help continue the advances against heart and vascular disease the Washington Heart Association in affiliation with the American Heart Association in its campaign for funds this year actively promotes this feeling of optimism in "New Hope for Hearts."

"New Hope for Hearts" is more than a slogan. There is real meaning in the phrase. The incidence of rheumatic fever and rheumatic heart disease has been falling steadily in the past 50 years, and this decline preceded the present-day use of antibiotic and hormonal therapy. This is probably a reflection for the most part of better living conditions. ACTH and cortisone are new tools in the therapy of rheumatic fever, but their true value is yet to be determined. The antibiotics of course have found a definite place in the prevention of rheumatic fever. So in the field of rheumatic heart disease there is real hope. Bacterial endocarditis, formerly fatal in all instances, in less than 10 years has become curable in most by adequate penicillin or like substances. There have been tremendous and dramatic strides made in the field of cardiovascular surgery—the cure of patency of the ductus arteriosus and coarctation of the aorta, the improvement of patients with tetralogy of Fallot, congenital tricuspid stenosis, and pure pulmonary stenosis, and most recently help for patients with rheumatic heart disease by valvulotomy and commissurotomy. Research, both medical and surgical, is going forward in the fields of hypertensive and coronary heart disease, and we hope there will be success in the not too distant future in this attempt to prolong useful lives.

The great improvement in health outlook since the "good old days" stems from many factors, the most important of which, of course, has been research. The Washington Heart Association gives 25 per cent of the funds collected in its campaign to the American Heart Association for use under its direction for research wherever and however the American Heart Association believes there is need for research funds and promise of benefit for everyone. Last year the

American Heart Association and its affiliates allocated $1,250,000 to heart and vascular research. It appointed the first of a series of Career Investigators. This inaugurated a form of support for research that is unique among national health organizations. Ten per cent of the funds collected by the Washington Heart Association is used for research carried on in our own local hospitals and medical schools. It brings leaders in research to Washington to tell us of advances elsewhere in the field of cardiovascular disease.

The remainder of the funds collected is used for community service. Thousands of leaflets of instruction have been distributed. Have you received "Examination of the Heart" which the Washington Heart Association made available to physicians of this area? Do you have the "Cook Book for the Salt-Free Diet" to give to your patients? Those are only 2 of several informative booklets. The camp for children with heart disease has been again a deeply appreciated success for some 120 children. And there is now an occupational therapy department for the homebound cardiac patients; adults disabled by the effects of heart or vascular disease are visited weekly and efforts toward rehabilitation are carried on. Incidentally, patients for occupational therapy may be referred by private physicians as well as by hospitals or clinics, a fact that may not be widely known.

The Washington Heart Association is not unaware that the multiplicity of campaigns creates a problem for the community and for the Association itself. It reaffirms its readiness to join with other comparable health groups in some form of "Health Fund." Until such plans mature, the Washington Heart Association must finance its work through the established methods of an annual campaign for funds.

The Washington Heart Association will open its 1952 campaign for funds and "New Hope for Hearts" on February 1, 1952. The goal is $80,000, a comparatively small sum for this metropolitan area to raise to combat the greatest cause of death and disability today. The goal is better health and longer lives for all of us and for our children, something which cannot be easily measured in currency.

BERNARD J. WALSH, M.D.
President, Washington Heart Association, Inc.

MODERN THERAPY; ACCEPTED METHODS OF TODAY, TRENDS FOR TOMORROW

The above title is the central theme of the Midwinter Seminar to be held in the Medical Society's auditorium on Wednesday and Thursday, February 20 and 21, 1952.

Believing that the primary object of the practicing physician is and should be to provide the patient with the best possible treatment for the particular ailment from which he suffers, the Society's Program Committee is planning this Seminar to be a practical 2-day study of the latest advances in all lines of therapy. Each speaker will open his talk with a brief résumé of the clinical entity he is discussing and will spend the greater portion of his talk outlining how this disease should be treated. He will close with a report on current investigative work. Papers will be limited to 20 minutes; an additional 10 minutes will be allotted each speaker for direct questions from the floor. Moderators will maintain rigid adherence to the time schedule and will insist that questions be brief and pertinent to the topic under discussion. As wide a range of subjects as possible will be discussed.

All of the speakers at the Seminar will be local physicians, either clinicians actively engaged in the practice of medicine or physicians doing special investigative work in hospitals. Each speaker is being screened by the Committee not only for his knowledge of the subject but also for his ability to present that knowledge to an audience of several hundred others.

Many physicians do not appreciate the wealth of excellent investigative work which is being carried on in our local hospitals, including not only the private institutions and the municipal hospital but the service and veterans' hospitals as well. All of this cannot be covered in 2 days, but much of the more significant work which is ready for publication will be presented.

Thus the Committee feels it will present a Seminar, by and for Washington physicians, which will proudly take its place alongside the ANNUAL SCIENTIFIC ASSEMBLY as a medical event of such significance that every Washington physician will feel that he must attend.

DARRELL C. CRAIN, M.D.
Acting Chairman, Program Committee

THE ELEVENTH DAVIDSON LECTURER

Dr. Jonathan Marshall Williams was selected by the Davidson Lecture Committee to present the Eleventh Davidson Lecture on February 20. Usually the Davidson Lecture is given at one of the first scientific meetings in October, but this year, with the change in program procedure, the Davidson Lecture will be held in connection with the Midwinter Seminar. The subject of the address will be "The Amygdaloid Nucleus."

The Davidson Lecture was established in 1929 to commemorate the outstanding service rendered to the medical profession by Dr. Edward Young Davidson, who was almost solely responsible for the erection of the Medical Society's "home" at 1718 M Street, N.W. The Lecturer is selected biennially on the basis of competition by a subcommittee of the Executive Board. The award consists of a certificate and the income from the Davidson Lecture Fund, an amount of money subscribed by members of the Society many years ago to be used for this purpose. This year members of the subcommittee which selected the winning paper were: Dr. John Minor, *Chairman;* Drs. Walter Freeman, William M. Ballinger, Raymond T. Holden, and Herbert P. Ramsey. The Committee was particularly pleased with Dr. Williams' contribution.

Dr. Williams is one of the younger members of the Medical Society of the District of Columbia. He holds a teaching position with George Washington University School of Medicine as Associate in Neurosurgery, a post which he has held since 1947. The year prior to this appointment he was a member of the faculty of Loyola University School of Medicine as Clinical Instructor in Neurosurgery.

JONATHAN M. WILLIAMS, M.D.

Dr. Williams was born in Chicago, Illinois, August 30, 1912, the son of David Irwin and Agnes Marshall Williams. He was educated in the public schools of Evanston, Ill., and attended the College of Wooster in Wooster, Ohio. He received his preclinical training at Loyola University School of Medicine, receiving the degree of Bachelor of Science in Medicine in 1936. Two years later he was granted his medical degree from the University of Chicago School of Medicine. He interned at the City Hospital in Cleveland, Ohio.

After his internship Dr. Williams began intensive study in the field of neurosurgery. He was resident physician at City Hospital for another year and served a year's residency at Gallinger Municipal Hospital, Washington, from 1940 to 1941. From 1941 to 1942 he held a fellowship in neurosurgery and neurology at George Washington University Hospital. With the advent of World War II he was commissioned in the Medical Corps of the U. S. Navy, serving for four years, 1942–1946. He was separated with the rank of Lieutenant Commander. In recognition of his services he was awarded the Purple Heart, two Navy Unit commendations, and the Asiatic Medal with five campaign stars.

The first year following his separation from Naval service, Dr. Williams spent in Chicago, Illinois, in association with Dr. Harold C. Voris, their practice limited to neurological surgery. In 1947 he moved to Washington, D. C., where he has carried on the private practice of his specialty. His office is located at 2014 R Street, N.W.

Dr. Williams is on the medical staff of many of the Washington hospitals. He is Attending Neurosurgeon at George Washington University, Garfield Memorial, Children's, and Gallinger Hospitals; staff consultant to Episcopal Eye, Ear, Nose and Throat; and special consultant to Newton D. Baker Veterans Hospital in Martinsburg, West Virginia. He is a diplomate of the American Board of Psychiatry and Neurology, in Neurology, and of the American Board of Neurological Surgery.

An Active member of the Medical Society of the District of Columbia since 1947, Dr. Williams has participated in many committee activities. For the 22nd Annual Scientific Assembly of the Society he did an outstanding piece of work as Chairman of the Scientific Exhibit; this year he is Vice General Chairman of the Committee on General Arrangements for the 23rd Assembly, and will therefore become General Chairman in 1953.

Dr. Williams is a Fellow of the American Medical Association and a member of the American Academy of Neurology. He is a member and Past Chairman of the Medical Society's Section on Neurology and Psychiatry, and Chairman of the Medical Advisory Committee of the Washington Chapter, United Cerebral Palsy Association.

Already he has to his credit an impressive list of papers which have been published in national and state medical journals, including the Medical Annals of the District of Columbia. He prepared the Section on Neurology for the third edition of "A Textbook of Medicine" by Dr. Wallace M. Yater.

Dr. Williams was married to Miss Morrell Liphart in 1939. They are the parents of five children, David M., Stephen C., Meredith Ann, Morelle Elizabeth, and Deborah Rose. The last two are twins, who accented Dr. Williams' achievement of being named the Davidson Lecturer by being born the same day he was notified of the award. The family resides at 705 Highland Avenue, N.W.

In and Out of Focus

Medicine in Washington 1867

There are few pastimes which your Observer finds more enjoyable than browsing through a shelf of old books. He is not one of those who can afford to indulge in the luxury of first editions, but that does not dampen his enthusiasm. He never passes a book shop that he is not tempted to dally awhile. To him, adventure beckons and it is difficult to resist.

Your Observer discovered quite by accident that old medical books also hold a fascination for Dr. Henry L. Darner, well-known member of our Medical Society. He has a standing order with booksellers in Washington for the type of books in which he is interested. One evening at dinner, several months ago, Dr. Darner showed your Observer a modest little volume entitled "Medical Register of the District of Columbia, 1867." He had just received it from one of his "scouts." Thumbing through its pages your Observer noted some highly interesting historical information which he felt would be of interest to readers of the MEDICAL ANNALS. He asked if he might borrow the Register, a request which was gladly granted.

After digesting its contents more thoroughly, your Observer has selected for publication portions which are most revealing of the medical life and institutions in our community some 85 years ago. Dr. J. M. Toner, who was to become the President of the Medical Society of the District of Columbia in 1871, and who is the author of the Register, writes in the preface:

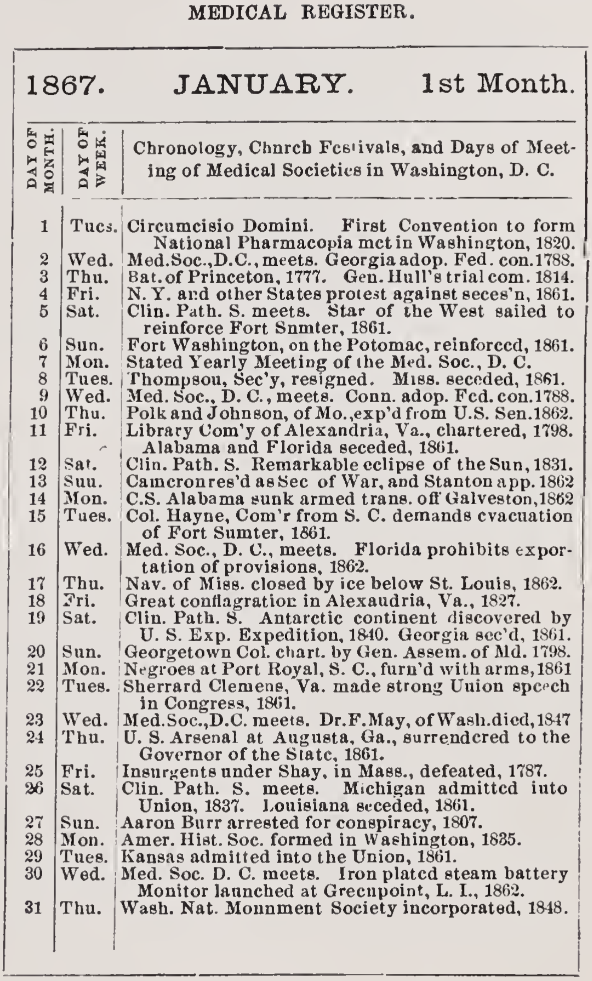
"The work, in its general scope, is modeled after the 'New York Medical Register,' and is designed to give information of all Medical Societies, Colleges, Hospitals and Infirmaries, with brief notices of our public and private benevolent Institutions, Libraries, etc., and the names of the officers and physicians in charge.

"It is believed that a work supplying this information, with the modes of admission to the different institutions of charity, will be useful to the profession and the public generally."

There follows a monthly medical calendar of events. Reproduced in the next column is the calendar for January, 1867.

It will be observed that the calendar was a catch-all, all sorts of meetings and anniversaries being noted.

Included in the "Register" are a number of organizations and institutions which Dr. Toner describes in more or less detail. Here are some excerpts:



MEDICAL REGISTER.

1867. JANUARY. 1st Month.

DAY OF MONTH.	DAY OF WEEK.	Chronology, Church Festivals, and Days of Meeting of Medical Societies in Washington, D. C.
1	Tues.	Circumcisio Domini. First Convention to form National Pharmacopia met in Washington, 1820.
2	Wed.	Med.Soc.,D.C., meets. Georgia adop. Fed. con.1788.
3	Thu.	Bat. of Princeton, 1777. Gen. Hull's trial com. 1814.
4	Fri.	N. Y. and other States protest against seces'n, 1861.
5	Sat.	Clin. Path. S. meets. Star of the West sailed to reinforce Fort Sumter, 1861.
6	Sun.	Fort Washington, on the Potomac, reinforced, 1861.
7	Mon.	Stated Yearly Meeting of the Med. Soc., D. C.
8	Tues.	Thompson, Sec'y, resigned. Miss. seceded, 1861.
9	Wed.	Med. Soc., D. C., meets. Conn. adop. Fed. con.1788.
10	Thu.	Polk and Johnson, of Mo., exp'd from U.S. Sen.1862.
11	Fri.	Library Com'y of Alexandria, Va., chartered, 1798. Alabama and Florida seceded, 1861.
12	Sat.	Clin. Path. S. Remarkable eclipse of the Sun, 1831.
13	Sun.	Cameron res'd as Sec of War, and Stanton app. 1862
14	Mon.	C.S. Alabama sunk armed trans. off Galveston, 1862
15	Tues.	Col. Hayne, Com'r from S. C. demands evacuation of Fort Sumter, 1861.
16	Wed.	Med. Soc., D. C., meets. Florida prohibits exportation of provisions, 1862.
17	Thu.	Nav. of Miss. closed by ice below St. Louis, 1862.
18	Fri.	Great conflagration in Alexandria, Va., 1827.
19	Sat.	Clin. Path. S. Antarctic continent discovered by U. S. Exp. Expedition, 1840. Georgia sec'd, 1861.
20	Sun.	Georgetown Col. chart. by Gen. Assem. of Md. 1798.
21	Mon.	Negroes at Port Royal, S. C., furn'd with arms, 1861
22	Tues.	Sherrard Clemens, Va. made strong Union speech in Congress, 1861.
23	Wed.	Med.Soc.,D.C. meets. Dr.F.May, of Wash.died, 1847
24	Thu.	U. S. Arsenal at Augusta, Ga., surrendered to the Governor of the State, 1861.
25	Fri.	Insurgents under Shay, in Mass., defeated, 1787.
26	Sat.	Clin. Path. S. meets. Michigan admitted into Union, 1837. Louisiana seceded, 1861.
27	Sun.	Aaron Burr arrested for conspiracy, 1807.
28	Mon.	Amer. Hist. Soc. formed in Washington, 1835.
29	Tues.	Kansas admitted into the Union, 1861.
30	Wed.	Med. Soc. D. C. meets. Iron plated steam battery Monitor launched at Greenpoint, L. I., 1862.
31	Thu.	Wash. Nat. Monument Society incorporated, 1848.

American Medical Association

"The Association is composed of permanent members and delegates from regularly organized Medical Societies, Medical Colleges, Hospitals, Lunatic Asylums, and other permanently organized medical institutions of good standing in the United States, and from the American Medical Society of Paris. A Delegate, after serving one year, becomes a permanent member. Each local society has the privilege of sending one delegate for every ten of its regular resident members, and one for every fraction of more than half this number. The faculty of every Medical College and chartered school have the privilege of sending two delegates. The professional staff of every chartered or municipal hospital containing a hundred inmates or more have the privilege of sending two delegates and every other medical institution of good standing has the privilege of sending one delegate.

* * * *

"The profession of the District of Columbia is entitled under the regulation of the Association to representation from the following institutions:

The Medical Society of the District of Columbia.
The Medical Association of the District of Columbia.
The Clinico-Pathological Society of the District of Columbia.
The National Medical College.
The Medical Department of Georgetown College.
The Government Hospital for the Insane.
The Columbia Hospital for Women, and Lying-in Asylum.
Providence Hospital.

Washington Asylum.

"The Medical Corps of the Army and Navy of the United States are each entitled to representation in this Association, and usually send two delegates each."

Medical Society of the District of Columbia

"This Society was organized on the 26th September, 1817. Subsequently a charter was obtained from Congress, which received the approval of the President of the United States on the 16th February, 1819. The charter gave to the Society the authority to examine and license duly qualified Physicians to practice medicine within the District of Columbia.

"The Society is composed of honorary and resident members, and fellows. Its object is to 'grant licenses agreeably to the charter, and the consideration and promotion of all subjects connected with medicine, and the collateral branches of the science.' "

* * *

BOARD OF EXAMINERS

J. M. Toner, M.D.
S. A. H. McKim, M.D.
J. F. Thompson, M.D.
Johnson Eliot, M.D.
James E. Morgan, M.D.

Medical Association of the District of Columbia*

"The object of the Association is the elevation of the profession, the establishment of a code of ethics and a fee bill, and the promotion of harmony and good fellowship among its members.

* * *

"Applications for membership are made by letter to the Secretary, who will lay the application before the Association at its next meeting. If the applicant be a member of the Medical Society of the District of Columbia, and duly qualified, he will be at once balloted for, and upon receiving two-thirds of the votes cast, will be declared a member, on signing the regulations and code of ethics. These are the same in principle as those of the American Medical Association."

OFFICERS OF THE ASSOCIATION

Joshua Riley, M.D.	President
Joseph Borrows, M.D.	Vice-President
J. W. H. Lovejoy, M.D.	Secretary
J. M. Toner, M.D.	Treasurer

Clinico-Pathological Society of Dist. of Columbia

"This association was formed in May, 1865, by the junior practitioners of the city. The chief object of the Society, as expressed in its by-laws, is for 'mutual improvement in diagnosis and clinical observation.'

"It was originally organized with a corps of active members, limited to twelve. The number has since been increased to sixteen. Each active member is required by the constitution and by-laws to present a medical or surgical case, or essay, for the consideration of the Society, in the order in which his name appears in the alphabetical list of members. There is no limit to the number of honorary members, but so far a few only have been chosen."

* * *

Dr. H. P. Middleton	President
Dr. S. J. Todd	Secretary

ACTIVE MEMBERS

Dr. Wm. B. Drinkard
Dr. C. M. Ford
Dr. A. F. A. King
Dr. William Lee
Dr. H. P. Middleton
Dr. D. W. Prentiss
Dr. H. A. Robbins
Dr. Wm. E. Roberts
Dr. J. F. Thompson
Dr. S. J. Todd
Dr. James T. Young

HONORARY MEMBERS

Dr. W. P. Johnston	Washington
Dr. James C. Hall	Washington
Dr. C. H. Liebermann	Washington
Dr. F. J. Bumstead	New York

Georgetown College

"This institution is owned by the Society of Jesus, and was chartered by the General Assembly of Maryland in 1798. In 1815 Congress amended the charter, and granted them all the privileges of a university. The order has erected large and imposing college edifices on a beautiful and commanding site, overlooking the city of Washington and the Potomac river, and a large district of Virginia. Adjacent to the College on an eminence stands their Observatory, where they have first-class astronomical apparatus.

"Surrounding the College is a large enclosure, part of which is laid off in tasteful walks and play-grounds, and the remainder is cultivated as a garden and vineyard. Although the organization of the College is Catholic, youths of other denominations are received and placed on an equality of privileges and advantages with those of their own faith.

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* The Medical Association of the District of Columbia was amalgamated with the Medical Society of the District of Columbia in 1911, the latter taking over the activities of the former.

"The average annual number of students at this College is about 225.

"The course of classics and mathematics taught in this institution is scarcely equalled by any other College in the country. Studies were partially interrupted in the College during the war, in consequence of one of the buildings being used as a hospital. They are now reoccupied by the College, at which there is a large class of students assembled from all parts of the country.

* * *

"The following are the names of the chief officers of the College:

Rev. Bernard A. Maguire, S. J., President
Rev. Edmund J. Young, S. J., Vice President
Grafton Tyler, M.D., Physician

* * *

"The eighteenth annual lecture term of 1867–68 will commence on the 10th October next, and terminate in March.

"The following is the Faculty of Medicine:

Noble Young, M.D., President, Professor of Principles and Practice of Medicine.
Flodoardo Howard, M.D., Treasurer, Professor of Obstetrics and Diseases of Women and Children.
Johnson Eliot, M.D., Dean, Professor of Principles and Practice of Surgery.
James E. Morgan, M.D., Professor of Materia Medica and Therapeutics.
Thomas Antisell, M.D., Professor of Military Surgery, Physiology, and Physiological Chemistry.
Montgomery Johns, M.D., Professor of General, Microscopic and Descriptive Anatomy.
Silas L. Loomis, M.D., Professor of General Chemistry and Toxicology.
J. H. Thompson, M.D., Professor of Surgical Diseases of Women.
D. H. Hagner, M.D., Professor of Clinical Medicine.
W. Evans, M.D., Demonstrator of Anatomy.

"The fees for the full Course of Lectures	$105.00
Matriculation fee (paid only once)	5.00
Demonstrator's fee	10.00
Graduation fee	30.00

"Students are not compelled to take all the tickets during one session. Fee for single ticket $15."

Columbian College

(now George Washington University)

"This institution was established by the liberality of the denomination of Baptists in 1819, and chartered by Congress, with the privileges of a University, February 9, 1821. One of the most beautiful sites in the District of Columbia was selected for the College, commanding a view of Washington, Georgetown and Alexandria. The buildings of the institution are large, substantial, and tasteful. The extensive grounds of the College have recently been improved by the laying out of walks, the planting of fruit and shade trees, and the erection of a stone wall along the Fourteenth-street road, &c., &c. A donation by Congress to this institution, in 1834, of vacant lots in the city of Washington, valued at $25,000, greatly assisted the trustees in the enterprise.

"The College under its present able management, is well sustained, and, from the number of its students, may be considered as in a flourishing condition. There are 155 students in the academic department.

* * *

"The following are the chief officers of the institution:

Rev. George W. Samson, D.D., President of the Faculty.
Col. James L. Edwards, President of the Board of Trustees.
William Ruggles, LL.D., and other able Professors.

* * *

"The Medical Department of the College was organized, and lectures commenced, March 30, 1825. The first class graduated in 1826. With slight interruptions, medical lectures have been annually delivered ever since to good classes, by able Professors.

"The Medical Faculty, some years ago, adopted the present name, 'National Medical College,' but the degree of M.D. is granted under the authority of the charter of Columbian College.

"Recently W. W. Corcoran gave to the Trustees of Columbian College a handsome building on H Street, between Thirteenth and Fourteenth streets, for the use of the Medical Department of the College, where a course of lectures is now being delivered to a class of about twenty-five students.

"The following is the Faculty of the National Medical College:

Thomas Miller, M.D., Emeritus Professor of Anatomy and Physiology, and President of the Faculty.
William P. Johnston, M.D., Professor of Obstetrics and Diseases of Women and Children.
John C. Riley, M.D., Professor of Materia Medica and Therapeutics.
Nathan Smith Lincoln, M.D., Professor of Special, Operative, and Clinical Surgery.
George C. Schaeffer, M.D., Professor of Chemistry.
George M. Dove, M.D., Professor of the Theory and Practice of Medicine.
John Ordronaux, M.D., Professor of Physiology, Pathology, and Medical Jurisprudence.

Thomas R. Crosby, M.D., Professor of General and Military Surgery and Hygiene.
J. Ford Thompson, M.D., Professor of Anatomy.
A. Y. P. Garnett, M.D., Professor of Clinical Medicine.
William B. Drinkard, M.D., Demonstrator of Anatomy.
Frederich Shafhirt, M.D., Curator of Museum.

"The lectures commence on Monday, 15th October.

The entire expense for a full course of lectures by all the Professors is	$105.00
Single tickets	15.00
Practical Anatomy, by the Demonstrator	10.00
Matriculating fee, payable only once	5.00
Graduating expenses	30.00

No charge made for clinical lectures."

These are merely samples of the highly interesting historical data contained in the Register. Illustrative of the diversification and the extent of additional information it contains are the following headings: American Pharmaceutical Association, Pharmaceutical Association of Washington, Providence Hospital, Columbia Hospital for Women, and Lying-In Asylum, Government Hospital for the Insane, Surgeon Generals of the U. S. Army, Army Medical Museum, Subdivision of Vital Statistics, List of Medical Officers of the U. S. Army on Duty in Washington City, Jan. 1, 1867, Military Asylum, Washington City Post Hospital, Kalorama Hospital, Bureau of Medicine and Surgery of the U. S. Navy, Naval Hospital, Freedmen's Hospital, Washington City Orphan Asylum, St. Vincent's Female Orphan Asylum, St. Joseph's Male Orphan Asylum, St. Ann's Infant Asylum, National Association for the Relief of Destitute Colored Women and Children, National Soldiers' and Sailors' Orphan Home, Washington City Government, Washington Asylum, Washington Small Pox Hospital, Ward Physicians for the Poor, Ward Apothecaries for the Poor, Board of Health, Georgetown, D. C., and Georgetown-Ward Physicians.

Following the above are names of qualified medical practitioners, apothecaries and druggists in the District.

This is by no means a complete list of the subjects dealt with, for the author takes it for granted that the interest of his readers will include such topics as Laying the Cornerstone of the Capitol of the United States, Biographical Sketches of Senators, and the Smithsonian Institution.

Your Observer was astonished at the amount of information Dr. Toner found possible to incorporate in such a modest volume. Washington physicians who like making journeys into yesterday should prevail upon Dr. Darner to permit them to peruse, if not to borrow, the Register.

★

County Fair?

Bernard Devoto, mainstay of the editorial staff of *Harper's Magazine* has, on occasion, been caustic in his criticism of the American Medical Association. Much of it has galled your Observer who, if he were in the position to do so effectively, would have taken issue with the belligerent Mr. Devoto. In fairness to Mr. Devoto, however, it must be admitted that he has not been wrong on all counts. There are vulnerable spots in the armor of any organization and that is true of the American Medical Association.

In an article which appeared in *Harper's* some two or three years ago Mr. Devoto described the American Medical Association meeting at Atlantic City in more or less acid language. His sharpest barbs were directed at the technical or commercial exhibits. He described the atmosphere in those exhibits as that of a "county fair." Your Observer squirmed a bit at that one, for the term, in his opinion, was too accurate for comfort.

Early last year a mimeographed copy of an address came across your Observer's desk entitled "Medical Conventions-County Fair—Or" by S. M. Fossel, Assistant Manager of Sandoz Pharmaceuticals, given before the American Pharmaceutical Manufacturers' Association on January 29, 1951. Certainly no one could charge Mr. Fossel with being unfriendly to the AMA, but his conclusions coincided surprisingly with those of Mr. Devoto where technical exhibits were concerned.

Here are some of the views expressed by Mr. Fossel:

"I am sure that the real purpose of any worthwhile physician in attending a medical convention is to gain scientific knowledge. I am very much in doubt as to whether the direction we are taking with medical exhibits is leading toward this goal. Certainly the use of a brightly lighted exhibit, beautiful from the standpoint of design and art, is not contributory. The increased use of samples and souvenirs is not contributory. The attendance of exhibitors who play no real part in the medical field is no great contribution. With the trend as it is today, toward accepting almost all types of exhibitors, I am sure that within a matter of months some of us will be having the Hadacol people and perhaps that long sought-after parrot in the next booth to us. This is something that none of us want.

"Therefore, the first point I want to make is that in our opinion medical conventions should be limited to companies that are directly related to the medical profession and have something of a scientific nature to present, in the way of pharmaceuticals, medical books, etc.

"Then, we face another problem in medical conventions. It is one which is not entirely in our hands. I believe this problem, however, is in part our responsibility because of the type of conventions we have. If we did not have an air of 'county fair' about our medical convention technical exhibits, I do not believe this problem would exist. Who should be permitted to attend medical conventions? We believe these meetings should be limited to physicians, internes and residents. However, with free souvenirs and exhibitors who are not related to the medical field, this section of the meeting has become very popular with the doctor's family, his children, friends and many groups who would not spend one minute at a scientific exhibit. Perhaps if we present exhibits which really contribute to the medical meetings, we will not have to take this problem up with the physician groups in control of these meetings.

"Earlier, I stated that it was my opinion that physicians attend medical conventions to obtain scientific information. We recently had the fine coöperation of Research Society, Inc. in conducting a survey on problems related to medical conventions. Mr. William T. Doyle, President, has furnished us with the following data.

"One of the questions we asked was, 'Do you attend medical conventions to secure scientific information?' The answer was unanimous. One hundred per cent of all physicians replying stated that they did attend medical conventions to secure scientific information.

"We asked another question which will lead into the most important point we have to discuss regarding conventions. The question was, 'Would you like to have the research department of pharmaceutical manufacturers present scientific exhibits of the type now seen in the physicians' scientific exhibit section at medical meetings?' Ninety-eight per cent said, 'Yes, we want scientific exhibits.'

"In this we undoubtedly have the answer to what the physician expects of us and we have an opportunity to develop an entirely different type of program for technical exhibits.

"We also asked, 'Do you think the exhibitors who have no relationship to the medical profession should exhibit?' Seventy-five per cent said, 'No, they should not.'

"Another interesting question and one that should be very convincing to all of us was: 'Would you spend more time at exhibits if they were scientific and you were permitted to stay without interruption unless you desired to ask questions of technically trained personnel?' Eighty-nine per cent stated that they would spend more time if we would contribute scientific exhibits.

* * *

"We must do something about medical conventions. We must pay the doctor for his time and make it well worth while for him to visit our exhibits. It is important that our exhibits aid the physician in giving better treatment to the patients waiting for him in his office when he returns home."

Your Observer would be the last to dispute most of the views expressed by Mr. Fossel. To a large extent they coincide with his own. However, there is one point on which he is not in full agreement—that is, that only physicians, interns and residents should be admitted to medical conventions. He believes that junio- and senior medical students especially are sufr ficiently advanced in their medical studies to benefit from seeing the technical exhibits. In the long run, commercial firms would also benefit by their attendance. Where the doctor's family, children and friends are concerned, if the changes suggested by Mr. Fossel become a reality, their interest in technical exhibits will soon diminish to a point where it would be no problem.

It is safe to predict that it will be some time before the ideas espoused by Mr. Fossel will be realized. In the meantime, your Observer would very much like to know how many officers of state medical societies have expressed their agreement or disagreement with Mr. Fossel. This should be indicative of what the future holds for technical exhibits.

Editorials on Politics Medical editors and business managers who gathered in Chicago on November 12 and 13, 1951, for the State Medical Journal Conference were well rewarded. All aspects of editing and business administration of state journals were discussed by individuals of wide experience. Your Observer, who was moderator of a session devoted to the literary aspects and the mechanical make-up of medical journals, came away with the feeling that the time he had devoted to the Conference had been well spent. That has not always been his experience at meetings of a similar type.

In reflecting upon what he had heard at the Conference he remembered something he thought would be of interest to his readers. He recalled a question, put to a physician-member participant in a panel discussion, on the job of an editor. This physician, who is editor of one of the state medical journals south of the Mason-Dixon line, was asked if he thought politics was a proper subject for editorial comment in medical journals. He thought not, in fact he deemed it highly improper. Others, including Dr. Wallace M. Yater, Editor of the MEDICAL ANNALS, took issue with him. They agreed that if "politics" was interpreted to mean supporting a specific candidate for office, they, too, would not favor editorials on politics. If, however, the broader issues which affect medicine was meant, that was "a horse of a different color." After all, they said, physicians are also citizens, and in common with other citizens they are responsible for their country's welfare. This is equally true of medical organizations, where health is concerned. When, in their opinion, the Government's policies jeopardize the quality of medical service, there is no reason why this fact should not be considered and commented on editorially in their official publications.

Your Observer gained the impression that a majority of those present agreed with the latter view. However, several stressed the point that an editor should not deviate from the policies of his medical society in discussing political issues. But there were those who dissented and thought that the editor should be given a free hand.

Your Observer concurs with the point of view expressed by Dr. Yater and others who thought as he did. He would amplify these views as follows:

1. It would be unrealistic to eliminate political editorials from state medical journals. After all, these journals are not only scientific publications but "house organs," devoted to organizational and other matters of a general nature.

2. Medical editors are too prone to give a one-sided picture of political problems. More objectivity would be highly desirable. The controversial medical issues are of far too great importance to the people and the profession to be dealt with in an emotional and highly prejudicial manner. This is not to suggest that many editors do not write objective editorials, for they do, but there are still too many who adhere so closely to the "party line" that they merely parrot what they consider to be official views.

3. Medical editors should be given some latitude in expressing opinions on political problems relating to health. In other words, they should not feel that they must avoid expressing views at variance with their organizations' policies. As previously stated, readers are entitled to an objective evaluation of these problems.

4. State medical journals should certainly not be a forum for the discussion of partisan politics. Anyone qualified for editorship of such a journal should realize without having to be reminded that the medical society which he represents includes all political persuasions. To forget this is to invite disunity among members and headaches for the editor.

5. One cannot emphasize too strongly the importance of sound and well thought out political editorials. Also there is a need for more forthright and lively comments on politics in our medical journals. Unless these qualities are present the time and effort devoted to them are wasted, for readers will pass them by.

The Doctor Is Human

There was never a time when physicians were held in higher esteem professionally than at present. This may be disputed by some, but an objective examination of the situation, your Observer believes, bears this out. Lest he be misunderstood your Observer hastens to direct attention to his use of the words "esteem" and "professionally." There are still many physicians who, like the old family doctor, command affection as well, but by and large the public stands in awe of the modern doctor because of his scientific knowledge. In other words, he is looked upon by many people as a kind of superman.

Reasons for this are not difficult to find. Among them are the widespread publicity given the so-called wonder drugs and the "miraculous cures" described with increasing frequency in the magazines and newspapers. Emphasis on early diagnosis and disease prevention has also been a contributing factor.

These and other less prominently publicized milestones in medical progress have combined to create the impression that the doctor is a "miracle worker." In the strictest sense, of course, he is performing miracles if his performance is compared with his predecessor of a generation or two ago. But he is far from infallible and would be the last to make such a claim. While he has learned a lot, he knows only too well that there are vast undiscovered areas of medical knowledge.

No matter what therapy he administers or preventive measures he adopts there is always the possibility of an unavoidable failure. A case in point is the early diagnosis of malignancies. Usually the doctor can prophesy with a fair degree of certainty that the growth will not recur. But even under the most favorable circumstances he would be brash to commit himself unqualifiedly as to the prognosis. Too often there have been unexplainable recurrences.

It is perhaps time that those who write on medical subjects for our popular magazines deglamorize the doctor and show him as he is—an earnest, efficient, and a highly successful worker in the field of medical science endeavoring to stay the hand of the Grim Reaper.

★

Mortality Among Our Elders

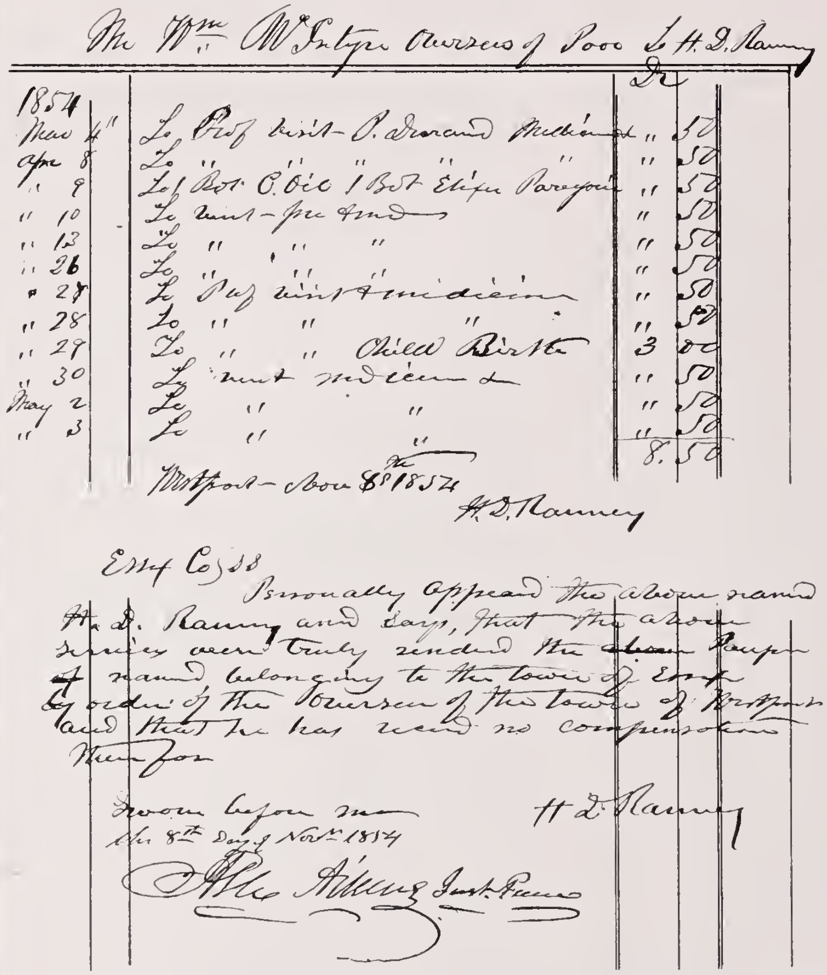
There has been much to-do in recent years about the increase in the number of elderly people. More people, we are told, are living to a ripe old age than at any time in our history. This has posed many problems. One of the most serious is that of employment. Compulsory retirement, especially of the group past 65 years of age, has been a controversial issue largely because employers have made few exceptions even among those whose physical and mental powers have not visibly deteriorated.

Ironically, it appears that except for the high mortality among the older age group in this country the employment situation would be much more serious. This is pointed up by the *Statistical Bulletin of the Metropolitan Life Insurance Company* for October, 1951, which observes that our mortality rates "lag behind other advanced nations."

The *Bulletin* lists the causes of death and comments thereon as follows:

> *Accidents.*—"Our accident record is particularly bad. The death rate from accidental injuries at ages 45 and over is higher in the United States than in any of the other 16 countries listed [England and Wales, Scotland, Australia, New Zealand, Canada, Ireland, South Africa, Denmark, Finland, France, Italy, Netherlands, Norway, Portugal, Sweden, and Switzerland]; this is true for both men and women."
>
> *Cardiovascular-renal diseases.*—These diseases are "serious among older men in the United States; only Australia and New Zealand come even near our level, while many countries record much lower rates. Our older women, however, have average death rates from cardiovascular-renal diseases."
>
> *Diabetes.*—"This disease is the one leading cause of death for which women over 45 in the United States show exceptionally high rates. Their death rate from this cause was 111.6 per 100,000 in 1948; Canada comes closest with a rate of 91.5. High diabetes mortality may reflect our intensive case-finding activities and better reporting of the disease as a cause of death in recent years; but even granting this, the level is still well above that in other countries."

A DOCTOR'S BILL—1854



Mr Wm McIntyre Overseers of Poor To H. D. Ranney Dr

1854			
Mar 4	To Prof visit - P. dressing Medicine	"	50
Apr 8	To " " " " "	"	50
" 9	To 1 Bot. C. Oil 1 Bot Elixir Paregoric	"	50
" 10	To visit - pre & med	"	50
" 13	To " " "	"	50
" 26	To " " "	"	50
" 27	To Prof visit & medicine	"	50
" 28	To " " "	"	50
" 29	To " " Child Birth	3	00
" 30	To visit medicine	"	50
May 2	To " "	"	50
" 3	To " "	"	50
		8.	50

Westport - Nov 8th 1854

H. D. Ranney

Essex Co ss

Personally appeared the above named H. D. Ranney and says, that the above services were truly rendered the ~~above~~ Pauper of named belonging to the town of Essex by order of the Overseer of the town of Westport and that he has recd no compensation therefor

Sworn before me
the 8th Day of Novr 1854

H. D. Ranney

[illegible] Just. Peace

The above statement for medical services to an indigent patient was found among some old papers by Dr. R. Lee Spire of the MEDICAL ANNALS' Editorial Board. It reveals that fees were, to say the least, modest in the 1850's.

Mortality rates due to tuberculosis, pneumonia and influenza and other important infectious diseases are average or below average as compared with those of other countries. The *Bulletin* emphasizes that if it were not for deaths from accidents among both sexes, the cardiovascular-renal diseases in men and diabetes among women, "the United States would rank very favorably among the countries of the world with respect to mortality at the older ages as well as in youth and midlife."

Here we run into another paradox, for the *Bulletin* informs us that a primary contributing factor "arises from the excellent medical care that has long been available in the United States. This has made it possible for a large number of people who suffered organic impairments as a result of infections in their earlier years to survive into old age. It is probable, therefore, that there is a greater proportion of persons with more or less serious disabilities among our elders than among those of other countries. This in itself would tend to make our mortality in old age fairly high.

> "Added to this, however, is another important factor that predisposes to high mortality in old age—obesity. The United States has long occupied an exceptionally favorable position among the world's countries with respect to her food supply. It is not surprising, then, to find that fully one fifth of our adults are overweight. As shown elsewhere in this issue, overweight is definitely associated with high death rates—particularly from the cardiovascular-renal diseases and diabetes. Many people are literally eating themselves to death, and this is reflected in our high mortality rates in old age."

The *Bulletin* concludes:

> "We have many opportunities for lowering the mortality of our elders through health education campaigns, safety programs, regular medical examinations, and early treatment of the degenerative conditions. The fact that older people are becoming an increasingly large part of our population makes it more urgent than ever that we take adequate measures to safeguard their health."

T. W.

Calendar of Medical Meetings

Date	*Society or Section*	*Program*	*Place and Time*
January 21	Osler	Paper: James E. Wissler, M.D. Case Report: Frank G. MacMurray, M.D.	Host: Dr. Marshall deG. Ruffin
January 22	*D. C. Society of Anesthesiologists	"The Preoperative Care of the Surgical Patient," Ralph M. Tovell, M.D., Hartford, Conn.	Medical Society Auditorium, 8:00 p.m.
January 28	Washington Medical and Surgical	Speaker: Andrew J. Welebir, M.D. Case Report: A. F. Castro, M.D.	Hotel 2400, 6:30 p.m.
January 30	*Washington Gynecological	"A Three-year Report of the Fetal Mortality Committee at Garfield Memorial Hospital," Caroline Jackson, M.D.	Medical Society Auditorium, 8:30 p.m.
February 5	Section on Ophthalmology	"Management of the Complications of Cataract Glaucoma Surgery and of Penetrating Injuries of the Eye," Alston Callahan, M.D., Professor of Ophthalmology, Medical College of Alabama	Kennedy-Warren, 6:00 p.m.
February 13	*Washington Heart Association	To be announced.	Medical Society Auditorium, 8:30 p.m.
February 18	Osler	Paper: Thomas McP. Brown, M.D. Case Report: Theodore Winship, M.D.	Host: Dr. Charles W. Ordman
February 19	Clinico-Pathological	Case Reports: Weston Bruner, Jr., M.D., and Henry L. Darner, M.D.	Host: Dr. Fred R. Sanderson
February 20 and 21	*Midwinter Seminar of D. C. Medical Society	Modern Therapy; Accepted Methods of Today, Trends for Tomorrow; also The Davidson Lecture by Jonathan M. Williams, M.D.	Medical Society Auditorium, 2:00–5:00 p.m. and 8:00–10:00 p.m.
February 23	* Washington Psychiatric	"Some Aspects of the Mother-Child Relationship," Jennie Waelder-Hall, M.D., Bethesda, Md.	Medical Society Auditorium, 8:30 p.m.
February 25	Washington Medical and Surgical	"Management of Metastatic Malignancy from Breast Cancer," James H. Scully, M.D. Case Report: Robert R. Montgomery, M.D.	Hotel 2400, 6:30 p.m.
February 28	* George Washington University School of Medicine	Kellogg Lecture: "Some Aspects of Adrenal Cortical Physiology of Interest to the Surgeon," John Hugh Mulholland, M.D., Professor of Surgery, New York University	Hall A, School of Medicine, 1335 H Street, N.W., 8:30 p.m.
March 10	* George Washington University School of Medicine	Kellogg Lecture: "Practical Aspects of the Physiological Problems of the Fetus and Newborn," James LeRoy Wilson, M.D., Professor of Pediatrics, University of Michigan	Hall A, School of Medicine, 1335 H Street, N.W., 8:30 p.m.

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* Open meetings

AN EDITOR TALKS SHOP*†

WILLIAM ALAN RICHARDSON

Editor, MEDICAL ECONOMICS

They say that no woman ever makes a fool out of a man. She simply gives him the incentive to develop his natural inclinations.

Some time ago, when asked by a newly appointed state medical journal editor how to get more and better nonscientific material for his pages, I almost followed a natural inclination myself. I almost said, "Forget it! Concentrate on the scientific articles instead."

Fortunately, our talk was interrupted; so I did not get around to answering his question until we met again a couple of weeks later. By that time I'd had a chance to give it more thought; and I felt that his aim to get more and better nonscientific material was less hopeless than I had first thought.

Here was a man who'd never been a state medical journal editor before. But he had good background for it, plus enough personal drive and ability not to be satisfied to do a mediocre job. He had talked with some of the top clinicians in his part of the country in order to plan his approach to the problem of getting the best possible scientific articles. Now he wanted my opinion about the nonscientific material. Since much of what I told him relates to my assigned subject today, I'll simply pass it on for whatever it's worth. In speaking of my editor friend, I'll call him Ed for short, though that is not his real name..

My first remark, when we really got down to cases, was an admission that I had felt pretty pessimistic about Ed's problem when he first posed it.

I felt that way offhand, I said, because I know most state journal editors have a common occupational complaint: not enough staff to produce the nonscientific copy they need; not enough money to buy it.

"Well, what's the matter with me?" Ed asked. "My assistant and I ought to be able to turn out an article or two a month on some social or economic or otherwise nonscientific aspect of medical practice . . . don't you think?"

Sure, I said, as long as you don't bite off more than you can chew and attempt what I call multi-source articles—meaning those that require the talents of several collaborators if they're going to be really authoritative. Take an example:

A number of *Medical Economics* readers awhile ago asked us to discuss the problem of whether a doctor who couldn't otherwise collect his fee from a patient should sue him. Once we decided to get such an article the question was: From whom?

A lawyer might well lack the physician's feeling for the ethical considerations. A physician—even the chairman of a medical ethics committee—would not have the legal training necessary. A professional management consultant might know only how suing patients affects the business side of the doctor's practice. And a professional writer—even a science writer—would lack the background to do such a many-sided job right without weeks of research.

Whom to get then? Who would be the proper source of an article on suing delinquents? Obviously, no one of the people mentioned—but all four. And it was from all four, acting in collaboration, that we finally got the article. The experts in ethics, law, and business supplied the basic material. The writer put it into interesting, readable form. The lawyer checked it for accuracy and signed it. And all were paid.

If a state medical journal editor can command such assorted talents without having to pay for them, well and good, but it doesn't often happen. Usually, I told Ed, your cue will be to skip such multi-source articles as I've described, and go after single-source articles instead. Of course, even a persuasive editor becomes less so if he continues to ask the same people to contribute gratis to his journal. He soon runs into excuses, broken promises, and, finally, flat refusals.

Let's be realistic about it. Anyone who takes valuable time to prepare or help prepare articles for you must have an incentive. The incentive among your physician-contributors is usually prestige, or reputation-building. Among other potential contributors, it's often (though not always) money.

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* Read before the Conference of Editors of State Medical Journals at American Medical Association Headquarters in Chicago on November 13, 1951.

† EDITOR'S NOTE: While Mr. Richardson prepared this talk especially for a meeting of state medical journal editors, it made such lively reading and contained so many practical suggestions for physicians who write or contemplate writing nonscientific articles for medical journals that permission was sought for its publication in the MEDICAL ANNALS. Mr. Richardson seemed somewhat surprised, but gladly consented to its being used.

If a physician writes a good scientific article and gets it published in a good medical journal, he knows that, even though he's not paid for it, it will enhance his professional standing. Not so if he writes a nonscientific article. He's primarily a doctor, not a businessman. So building a reputation in business is of little interest to him. He may work with you on one or two such articles as a personal favor. But that's usually as far as you can expect him to go unless he's under some special obligation or unless he's paid for his time.

Even if you had plenty of contributors on tap who would donate free all the time you needed, you'd still be up against it, I told Ed. For the plain fact is that few professional men—whether doctors, lawyers, accountants, architects, or otherwise—have the writing ability of even a lesser De Kruif. And most of those who do always seem to be too busy, or they're just about to leave on a trip, or they've just come back from one and are allegedly snowed under.

Now assuming the ridiculous: that you *had* a group of contributors who could write like Oslers and who'd give you, free of charge, all the time you wanted. There would be still another hard morsel to swallow, and that's the subject matter. Take the *Saturday Evening Post* writer who spends a balmy February cruising the West Indies on an expense account, tapping out a little article about it and getting paid $1,000 or so into the bargain. Nice work, you say. Now, for contrast, think of the lucky M.D. assigned by his state journal editor to do a colorful, exciting article on, say, the relative administrative costs of nonprofit versus commercial health insurance carriers.

Clarence Roy, formerly on the editorial staff of *Medical Economics*, came to us after a number of years spent as senior article editor of *Colliers*. "You warned me," he said once, "that articles about economics are hard to make interesting. It was the understatement of your life."

Ed wasn't one to let me reminisce long. He interrupted here to say, "Look. I thought you had some constructive ideas for me. So far, they've all been negative. How about it?"

I admitted he was quite right. I had simply wanted to begin the talk at the proper level—to point up what I'd said about social and economic articles at the start: Don't bite off more than you can chew. Better to do a few good articles of this kind than a lot of poor ones.

Now for some more practical, positive suggestions:

Each state medical society should decide, as a matter of basic policy, what it wants its journal to be. And you, I told Ed, are the trustee of that policy—the one responsible for carrying it out.

At present, there are three schools of thought: One holds that a state medical journal is primarily a vehicle for postgraduate medical education and should be made up almost exclusively of scientific articles. The second school holds that scientific articles belong in the J.A.M.A., in G.P., and in the specialty journals; that a state journal is primarily a house organ for organized medicine at the state level; and that, therefore, the bulk of its material should be organizational, economic, and otherwise nonscientific. The third school is of the opinion that a state medical journal should be all things to all members; that it must consequently find room for scientific papers, organizational news, and articles on the social, economic, and all other aspects of medical practice. Ed said he doubted that his state medical society had ever even thought of blueprinting its journal policy so specifically. In that case, I told him, the time is coming when it will have to do so; and you had better try to speed the day—if only so you, as editor, will know what's expected of you.

In times past, medical journal editors took pretty much what came to them. Now they're beginning to have to shape their journals to the needs of their readers. Reasons for this are the mushrooming of medical literature on all sides, a growing restiveness among doctors at having to contend with so much of it, and the consequent demand for greater selectivity.

Except in teaching centers and under other unusual circumstances, the state medical journal editor may well find his future supply of good scientific articles dwindling. More and more, the best research articles are going to the specialty journals. State journals, with the exceptions noted, are finding it ever more difficult to meet the competition of the specialty journals for topflight scientific papers.

Sir Thomas Lewis, as an individual practitioner, could draw pioneer deductions from his solo observations on clinical cardiology. But nowadays, less that is new or important develops that way.

Research is increasingly the product of teams, foundations, schools, and laboratories. The solo doctor is still the major contributor to the state medical journal; but because of the changing nature of research, he has less to contribute in the form of basic scientific progress.

Ed didn't seem entirely sold on this bit of reasoning. But I continued anyway.

Will you, I asked him, be content, in view of the trend, to sit by and let the specialty journals monopolize the best scientific stuff, thus compromising with quality? Or will you publish somewhat fewer (but good) scientific articles and somewhat more nonscientific ones?

He thought he'd have to think that one over.

"Do you have any doubts," he asked me, "about the appropriateness of nonscientific articles in a scientific state medical journal?"

I said no, I hadn't, because a state medical journal, in my view, is not exclusively a scientific journal.

Be that as it may, I said, I thought the nonscientific article lends itself particularly well to medical journalism at the state level. Why? Because the doctor really belongs to, and feels a part of his state society—more so, quite naturally, than of his very much larger national association.

As a matter of fact, I pointed out, the volume of such material in state journals in recent years has grown tremendously, as witness the many, many articles on medicine's public relations, its grievance committees, its night-call bureaus, its attempts to guarantee the best medical care to all the people, under private practice.

How can any doctor who wants to be well informed not read about important new changes in the mechanics of medical organization, about the profession's political problems, about the rising tide of voluntary health insurance (with its emphasis on careful record-keeping, fee-scheduling, and the like)?

Quite frequently, I remarked, a nonscientific article in a state journal will relate itself to an M.D.'s day-by-day work in a way that few scientific articles do.

In a recent issue of one state journal, for example, there were four scientific articles and several nonscientific ones. The scientific articles discussed a rare disease of the spleen, the advanced aspects of liver-function testing, the surgical removal of a lobe of the thyroid, and one man's experience with foreign bodies in the eye.

The nonscientific material included a statement about filing bills for home-town care of veterans; a piece about a chiropractic bill before the state legislature; some suggestions from the state's attorney general about writing prescriptions for barbiturates; a proposed amendment to the society's constitution; a calendar of hospital staff meetings; and an editorial supporting an M.D. who had refused to contribute under pressure to a hospital fund.

I'm not derogating the value of the four scientific articles one bit; nor am I saying that the nonscientific material made perfect bull's eyes. I am saying that the latter was quite as useful to the reader as the former; and I think the editor showed good judgment in giving the nonscientific articles as much space as he did.

As I told Ed, the appropriateness of socioeconomic material in a state medical journal raises no question. The real nut the editor must crack is: How to get such articles?

I'm convinced you *can* get them, I said—at least a good many types. So now a few words on *how*. Let me cite some real-life examples:

When the F.S.A. predicted an alarming doctor-shortage by 1960, one state medical journal editor got a local statistician to disprove the claim. The article he wrote attracted all sorts of attention because it was good and because it reflected some fresh, original thinking. It also furnished fuel for the society's speakers' bureau, and it gave rank-and-file doctors some valid retorts to use in social conversations that turned to the alleged shortage.

When newspapers headlined the black market in babies, one state journal editor got his state welfare department to assign a writer to explain the state's rather complicated adoption law. This, and an accompanying editorial, not only made interesting reading but actually straightened out the thinking of some of the journal's own readers.

Another editor based a first-rate article on a report of his society's committee on laboratory medicine, discussing the legal status of laboratories operated by laymen. Still another got a hospital chief-of-staff to write a story on how his institution's general practice service was functioning after a year's trial.

These examples, I think, are enough to illustrate the point as it relates to articles. There's great scope, too, for letters to the editor (if you're not already using them). Such letters in *Medical Economics* (we know from our readership reports) are among the most read items each month.

After all, why not give the reader a forum for his views? Isn't he entitled to it? Nonscientific material is a "natural" for this purpose. Here are a few examples of such letters submitted to state journals. Think, if you can, of copy more likely to attract reader-interest. For instance:

¶ A protest against an alleged monopoly in cancer biopsy specimen readings, charging that only members of the state society of pathologists were allowed to work on the program.

¶ A charge of overemphasis on board certification in hospital staff appointments.

¶ A discussion of the problem of whether mothers should be allowed to offer their own babies for adoption, without Government regulation.

¶ A query about whether it's all right ethically to mail patients reminders of health examination appointments.

¶ An expression of opinion that lobbying is a legitimate function of organized medicine.

¶ A statement that hospital staff men should be retired automatically at 65 to make room for younger men, and so on.

When I saw Ed on another occasion later, he asked me what luck I thought he'd have soliciting nonscientific articles and news by mail and phone. My answer was the same one I've given many times before: There's no substitute for contacts made in person. If there were, newspapers would not still be paying reporters to get their news for them.

As a state journal editor, you know that many such contacts are possible at meetings over the luncheon table, at the hospital, and elsewhere. To make these contacts, you have not only yourself but your assistants, your correspondents around the state, your field secretary (if the state society employs one), plus any of the society officers and members you can recruit as volunteer "idea men."

Not all these people will be sources of articles. But a number of them should, if encouraged, come up with ideas for articles and with short news items.

The society officers have a special obligation to see that the society and all its works (the journal included) succeed. So if you're up against it at any time, you can very properly put some pressure on them to help you out.

Harking back again now to those published reports of medical society councils and committees, I told Ed I'd like to make what I consider a highly important point for every state journal editor: Too many valuable news items or articles are found budding in these committee reports only to wither without blooming. If you feel it's good practice to publish such reports verbatim, all right. But don't let it go at that. See that those news buds bloom somewhere in your journal. And make sure they don't bloom unseen.

Base separate new stories on the most interesting committee reports. (Such stories will probably attract a lot wider readership than the reports themselves.) They have another value, too. Since the news story is much shorter than the full report and can usually be written well in advance of the report's publication, you stand a good chance of getting it into an earlier issue and thus having it reach the reader while still fresh.

If you report on a meeting, I advised Ed, tell what happened. Avoid provoking the reader's curiosity and annoyance by merely stating that such and such a meeting was held and that "several interesting topics were discussed." Capsule the results instead. Report all the worthwhile facts and opinions expressed. If, separately, in an editorial, you can give your own personal impressions of the meeting, so much the better.

If you doubt the prevalence of that annoying habit I mentioned—the habit of naming all the intriguing things discussed without telling what they were, here are just a couple of examples taken from the November, 1951 issues of state journals:

Example One: "The problem of the relationship between hospitals and physicians—especially as regards anesthesiology, pathology and radiology—was again aired, by means of a symposium during the convention."

Example Two: "He told what had been done in ——— County with reference to the creation of a health council."

These are but two examples. I have others. In each case the reader's curiosity is piqued by a rather vital topic. But he is then left high, dry, and frustrated.

I also suggested to Ed that when he publishes the proceedings of a meeting, or bases an article on it, he avoid labeling it, for instance, "Report of Meeting of Nov. 13th." This may do as a subtitle, for identification; but the main title should state the gist of what happened and be so worded as to capture the reader's eye.

Some good articles have as many as three or four subtitles, plus column headings and other typographical devices that tell the reader clearly what the article as a whole (and what each of its sections) is all about.

A good column heading on a page often inveigles a man into a story that he skipped at the start. It breaks up the page, too, and makes for easier reading.

I didn't know whether Ed's society was one of those that publishes a handbook for its members—a book that tells them what's what with respect to state medical licensure, state laws affecting medical practice, state taxes, local interpretation of the principles of medical ethics, local public health regulations, state medical and hospital statistics, local voluntary health insurance plans, and so forth.

If it did have such a handbook, I suggested that too might be a good teeing-off point for socioeconomic articles. No handbook of this kind is intended to be read through at one time. It's a reference book, pure and simple. Much of what's in it, if updated, rewritten interestingly in article form, and presented attractively, can be depended upon to draw readership.

Why? Because it's important stuff. It gives the local approach to each problem raised. And readers can't get it anywhere else—even in a publication like *Medical Economics* that devotes all its space to things social and economic but that necessarily takes a national, rather than a local, viewpoint.

I assume that the typical state medical journal editor subscribes to one or more news-clipping services or has a girl who clips for him the leading newspapers in his state and the many other printed media from which he can extract article and editorial ideas. Not all such editors, though, base news items on these clips. Nor do they often quote pertinent press comments. It's an idea worth considering.

Another worthwhile kind of material you can get is what we call a handitip. It's actually no more than a practical nugget or suggestion designed to help the reader save time, money, or effort in the daily conduct of his practice. But it's a highly popular type of material. Handitips, we find, are best picked up directly—in the course of visiting readers in their own offices.

A state journal editor, I reminded Ed, can also solicit material from men in the other professions and in business. These men have an incentive to write for you. The doctor is their client. They're often delighted to get their ideas over to medical men—and at no cost to you.

A professional management firm I know of was invited some years ago by the editor of the state medical journal to do an article on medical collection technics. Since then, all sorts of articles have been obtained from this firm and published in this journal, with mutual advantage.

I needn't dwell on the need to be careful in choosing such contributors. If anything such a man says indicates that he may be out mainly to "sell" the reader something, or if it suggests an unwholesome bias or one-sidedness, it's time to steer clear. You can't afford to be taken in by anyone who would sell the reader a bad bill of goods. I'm not talking about the obvious case here, but the subtly disguised one. A skeptical, challenging attitude is your only protection.

One of my own friends, a respected figure in the insurance business, has urged several articles on me. But I won't take them. What he writes is, at first reading, altogether plausible. But he's so biased in his own approach (perhaps he can't help it) that he fails to give the reader both sides of a situation. Unfortunately, the reader may not even know there is another side; so we feel it's up to us to play watchdog for him.

Articles from people in allied professions don't usually raise such problems. And they're not hard to get because a dentist, druggist, or nurse, for example, is often complimented by an invitation to fill an assignment for the state medical journal.

I come now to what I regard as another vital policy for state medical journal editors. When I talked with Ed about it, I put it more or less in these words:

Don't try, as a rule, for articles of national scope. These are necessarily broad-based; they demand broad-scale research; they're expensive to get; and the national journals take care of them anyway.

By the same token, don't reprint articles of national scope that have appeared in journals of national circulation. They'll be old stuff by the time you get around to them, and you'll get a reputation for devoting your journal to pickups instead of to original copy.

The lead articles in the current issues of at least two state journals make this very error. They report in detail pieces of Washington news that made headlines last summer. And they don't add one new thought to the original.

I repeat, then: Don't try for national articles in a state journal Instead, when it comes to important national news, report the local side of it. To illustrate:

If a survey is made of doctors' incomes in the United States, try to get the income figures for your state. Show the various breakdowns in your state. If some big national news occurs in Blue Shield, try to pick out and report the parts of it that affect your state in particular.

Once you've reported all the facts from a national story that apply exclusively to your state, you have another opportunity. And that is to interpret those facts, often in an editorial.

In every national story, then, look for the local twist. You'll then have something new and different for your readers. Actually, in publishing local facts and opinions about national developments lies your big chance to make a real contribution to the social and economic side of medical journalism. Some journals recognize this already. Others have not heard opportunity knocking.

They may have overlooked the fact, too, that in giving their readers the local slant on national news, they're in the enviable position of having no editorial competition whatever. The field is wide open. *Medical Economics*, for example, can't possibly delve into the local aspects of a story, except in those cases which have national significance.

Selecting the local news from a larger piece of national news is generally a job for the state journal editor or an assistant. The same may be true of the job of interpreting such news; though here it is often possible to invite the opinions of others.

Most people don't enjoy the hard work that painstaking research demands. But they enjoy expressing their opinions. It's easy. It's fun. And it inflates the ego without further inflating the dollar.

If you're not already doing so, then, you may find it worthwhile to invite guest editorials. Try the Governor of your state, if the subject is one he's likely to have an opinion on, or a leading newspaper editor, or a public health officer, or bank president, or labor leader. The possibilities are legion.

If you think that asking him for an editorial may strike him as too formidable a task, invite a long letter instead, or interview him.

You can, of course, develop editorial writers among your society members as well. It takes work to do this; but it may pay handsome dividends at deadline time. Give such a man a news item, for example. Let him point out its significance to doctors in your state. Several state (and county) journals have been doing this with telling effect. Such guest editorials needn't be lengthy. They take no digging for facts. So they're relatively easy to prepare.

The main thing is to be sure of your man—sure that he knows his subject and will bring sound judgment to it.

When Columnist Bob Ruark recently made some cogent remarks about medicine for his Scripps-Howard readers, the editor of the medical society journal in Ruark's home state was alert enough to reprint the columnist's remarks for local doctors and to append his own point of view.

Another state journal editor recently reported and discussed the Federal hospital building program in terms of how it would affect hospitals and doctors in his state.

Still other state journal editors have lately shown how their doctors will be affected by calls to military service, by Federal grants for civil defense stockpiling, by the diabetes detection drive.

Speaking of the diabetes drive, how much better to give it this local twist than to do as one state journal did and merely print the handout from national headquarters.

Guest editorials—likewise signed articles of opinion—have a prime virtue that's often overlooked. They allow you to plunge into really stimulating controversial issues without committing the journal or the society as such. If the view expressed is completely at variance with the society's, all the editor has to do is say so in an editor's note Readers recognize the value of free speech. In medical journals, I maintain, there ought to be more of it.

While we're on the subject of editorials, I should perhaps say I reminded Ed, in his early days, that an editorial is an expression of opinion. It is not a news report. It contains more than facts. Usually it interprets something. Sometimes it exhorts the reader to action. Now and then it simply views with alarm.

Here's another important point I tried to get over to Ed:

Besides giving the local slant on national news, a state medical journal may very properly give a national slant *if* it's new, original and different. One paragraph in a recent state journal editorial, for instance, begins with these words, "A most important factor in physicians' incomes was not even mentioned in the Commerce Department report. And it was barely suggested in the AMA's discussion" (and so on). Here's a cue that the writer of the editorial dug beneath the surface, that he has come up with a new, fresh, original angle. So the reader is all ears.

I've advised strongly against a state medical journal reprinting national news from a national medical journal, and, if necessary, I'll repeat the advice. But quoting a small part of a national medical story that relates specifically to your state—or that can be so interpreted—is another matter, and amply justified. *Medical Economics*, for one, is glad to allow such quotations—up to 300 words—without any formal request (but with credit, since the material is copyrighted).

Another thing I suggested to Ed: When you get your clutches on a local story that's really good, don't just mention it in a brief news item. Give it the "full treatment," that is, a complete article or even a series of articles.

Ed asked me whether I thought a medical journal should run its socioeconomic material in a special section set apart by its position and perhaps also by a different colored stock.

Frankly, I don't think this question is of consuming importance. Anything you can do, within reason and good taste, to make an article or department capture reader attention merits thought. But the substance of what you say—and how you say it—is the main thing. An attractive office, we all know, helps sell a doctor to his patients. Yet it's the doctor himself in the final analysis who tips the choice.

While my staff clips most of the state medical journals each month, I had not recently had occasion, until last week, to examine a good cross-section of them at one sitting, with an eye to their socioeconomic content.

My reaction, when I did so, was twofold: First, that the quality of such material in the better state journals had risen immeasurably, and, second, that this gain served to throw into sharper relief than ever the journals that are not doing a good job.

At one time or another, I've edited magazines whose editorial budgets have ranged from zero to six figures annually, as with *Medical Economics*. So I realize full well the limitations under which the better state medical journals operate.

For the fine work they're doing now, for the phenomenal strides they've made and seem about to make (in the face of overwhelming financial odds), my hat's off to them.

CALENDAR OF SPEAKERS

The following members of the Medical Society of the District of Columbia have addressed lay groups during the past several weeks. The Society maintains a Speakers Bureau, sponsored by the Committee on Public Relations, through which requests for speakers for lay groups can be filled.

Date	*Speaker*	*Subject or Title*	*Organization*
November 19	Dr. George Maksim	Child Care	Abram Simon Parent-Teachers Association
November 19	Dr. Thomas McP. Brown	The Wonder Drugs	The Torch Club
November 26	Dr. Henry H. Lichtenberg	Discipline in the Preschool Child	Parents of Sixteenth Street Highlands Coöperative Nursery
November 28	Dr. Dorothy Donley Dowd	The Psychological Aspects of Charm	Business and Professional Women's Club
December 4	Dr. M. Noel Stow	Glaucoma—Greatest Cause of Adult Blindness	D. C. Society for the Prevention of Blindness
December 5	Dr. Arthur C. Christie	A Longer Life and a Healthier One	Rotary Club

News and Personals

The first International Congress of Physical Medicine will be held in London, July 14 to 19, 1952. In accordance with the regulations of the International Federation of Physical Medicine, the meetings of the Congress will be reserved for matters dealing with the clinical, remedial, prophylactic and educational aspects of physical medicine and with the diagnostic and therapeutic methods employed in physical medicine and rehabilitation.

Applications for the Provisional Programme should be addressed to the Honorary Secretary, International Congress of Physical Medicine 45, Lincoln's Inn Fields, London, W.C. 2.

The 48th Annual Congress on Medical Education and Licensure will be sponsored by the Council on Medical Education and Hospitals of the AMA and the Federation of State Medical Boards of the United States. The meetings will be held in the Palmer House in Chicago, February 10 to 12.

The National Conference on Medical Service will convene at the Palmer House, Chicago, on Sunday, February 10, 1952. Dr. Harlan English, of Danville, Illinois, will be this year's Chairman; the Illinois State Medical Society will be host. The theme of the meeting is "America's Next Social and Health Crisis."

The Mississippi Valley Medical Society offers a cash prize of $200, a gold medal, and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics and education) and practical value to the general practitioner of medicine in this, the **Twelfth Annual Essay Contest** of the Society. Certificates of merit may also be granted to the physicians whose essays are rated second and third.

Contestants must be members of the AMA and citizens of the United States. The winner will be invited to present his contribution before the 17th Annual Meeting of the Society, to be held in St. Louis, Mo., October 1, 2 and 3, 1952. All contributions shall be typewritten in English in manuscript form, submitted in five copies, not to exceed 5,000 words, and must be received not later than May 1, 1952. Further details may be secured from Dr. Harold Swanberg, Secretary, Mississippi Valley Medical Society, 209–224 W.C.U. Building, Quincy, Ill.

The name of the Children's Country Home for Convalescent Children has been officially changed to **The Children's Convalescent Home.** The address is unchanged, 1731 Bunker Hill Road, N.E.

The Home has facilities for 38 convalescent and malnourished children ranging in age from infancy through five years. In general, eligibility for admission is based on the child's need for medical supervision preparatory to surgery, during recovery from illness, or malnutrition. Charges are based on the family's ability to pay and probable period of care required. Residence is not a requirement as children are accepted from the District of Columbia and surrounding counties, and from hardship transient families.

The Home is maintained by a Board of Lady Managers, of whom Mrs. Jane Wheeler is President. Dr. Frederic Burke is Medical Director. Mrs. Annabelle H. Kent, Administrator of the Home, extends an invitation to members of the District Medical Society to visit the institution at their convenience.

Physicians from all over the United States gathered in Los Angeles, California, December 4 to 7, for the **Fifth Annual Clinical Session of the American Medical Association.** Representing the Medical Society of the District of Columbia at the meetings of the House of Delegates were Dr. Herbert P. Ramsey and Dr. Hugh H. Hussey. Theodore Wiprud, Secretary of the Society, was also present for the meetings of the House. Dr. Oscar B. Hunter, Sr., Vice President of the AMA, attended the meetings.

Other Medical Society members who attended the AMA Session were: Drs. Jacob W. Bird, Edward H. Cushing, Richard H. Fischer, Julius Fogel, Joseph S. Lawrence, J. Winthrop Peabody, Alvin R. Sweeney, and Frank E. Wilson; also Colonel Joe M. Blumberg and Major General David N. W. Grant.

Dr. John W. Cline, of San Francisco, President of the AMA, addressed the assembly. Dr. Albert C. Yoder, of Goshen, Indiana, was named the "General Practitioner of the Year."

A feature of this Clinical Session was the first transcontinental transmission of color television, presented through the courtesy of Smith, Kline and French Laboratories, of Philadelphia, and the Columbia Broadcasting System. The program originated in the Los Angeles County Hospital where Dr. John C. Jones, surgeon, performed a coarctation on the heart of Richard C. Russell of Pacoima, Calif. Dr. Jones is Associate Professor of Surgery at the University of Southern California School of Medicine. The operation was witnessed by physicians in New York, Chicago and Los Angeles.

Colonel Joe M. Blumberg, MC, USA, Pathologist in the Laboratory Service of Walter Reed Army Hospital, and Dr. Victor M. Sborov, Director of the Hepatic and Metabolic Center of Army Medical Service Graduate School, Walter Reed Army Medical Center, presented an exhibit on the subject, "Why do a liver biopsy?"

Rear Admiral Lamont Pugh, Surgeon General of the Navy, presented a paper entitled, "Modern Advances and Trends in Military Medicine," December 7.

Dr. E. P. Luongo, of Los Angeles, an Associate member of the District Medical Society, participated in a Question and Answer Conference on Overweight, Nutrition and Health. His topic was "The Overweight Executive—Problems and Programs."

In a scientific exhibit on Control of Sound and Noise, Dr. Aram Glorig, of Washington, was one of several physicians who showed how sound absorbing materials can be used effectively in offices, hospitals, operating rooms, and industrial plants.

The Executive Board of the Medical Society of the District of Columbia, at its regular meeting, November 26, approved the proposal that a joint meeting be held with the District Bar Association on March 5, and that the theme of the meeting be "Malpractice."

President Costenbader proposed the name of Dr. Jonathan M. Williams as Vice General Chairman of the Committee on Arrangements for the 1952 Annual Scientific Assembly. Dr. William J. Tobin automatically becomes the General Chairman.

Because there have been enough volunteers to meet the present needs of the Defense Department, **Selective Service** has postponed again, this time until February, the call-up of 485 physicians for Army duty. The original call-up was scheduled for last August and September.

The 11th Annual Conference of the Maryland-District-Delaware Hospital Association was held at the Hotel Statler, November 26 and 27.

Mr. Leo G. Schmelzer, Administrator of Garfield Hospital, presided at the opening session. The welcoming address was made by District Commissioner F. Joseph Donohue.

Dr. Frank D. Costenbader, President of the District Medical Society, participated in a discussion on "Trustee-Administrator-Medical Staff Relationship" with Mr. F. A. Wardenburg, trustee of Memorial Hospital, Wilmington, and Sister M. Veronica, R.S.M., Administrator of Mercy Hospital, Baltimore.

Colonel W. L. Wilson, Assistant Administrator of the Health and Welfare Section, Federal Civil Defense Administration, and Mr. Robert S. Hoyt, Administrator of Lutheran Hospital, Baltimore, discussed "The Role of the Hospital in Civil Defense."

Dr. Anthony J. J. Rourke, President of the American Hospital Association and Medical Superintendent of Stanford University Hospital, San Francisco, gave the principal address at the annual dinner.

The George Washington University Medical Society held its second meeting of the season, November 28. Dr. Emil Novak, Assistant Professor of Gynecology of Johns Hopkins University, was the guest speaker; his subject was "The Relation of the Ovarian Hormones to Female Genital Cancer."

The Society voted to change its regular meeting date. All future meetings will be held on the third Wednesday of each month unless members are otherwise notified.

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The Washington, D. C. Section of the American Congress of Physical Medicine had a breakfast meeting, November 28, at Gallinger Municipal Hospital, where they were guests of Dr. Josephine Buchanan. Following breakfast the group inspected the new set-up of the physical medicine and rehabilitation departments, which they reported to be most impressive.

Dr. James P. Kane presented a paper on "Term Pregnancy Complicated by Ovarian Teratoma" before the **George M. Kober Medical Society,** November 19, at the Army-Navy Town Club. The paper was discussed by Dr. Tomas Cajigas.

The Society's Annual Christmas Party, December 17, at the Shoreham Hotel, was attended by wives and guests of members.

Members of the **Clinico-Pathological Society** were entertained by Dr. John Washington, December 18, at his home on Glenbrook Terrace. Two case reports were presented during the evening's program: "Axillary Tumor," Dr. Thomas Bradley and "Acute Rupture of the Interventricular Septum in Myocardial Infarction," Dr. John Minor.

The Washington Academy of Medicine held election of officers, December 6. The following members took office January 1 and will serve for two years:

Dr. Walter A. Bloedorn, *President;* Dr. William P. Herbst, *Vice President;* Dr. Errett C. Albritton, *Secretary;* and Dr. Roger M. Choisser, *Treasurer.*

The medical staffs of **Alexandria and Arlington Hospitals** report election of new officers. For Alexandria they are:

Dr. Ben C. Jones, *President;* Dr. Albert E. Long, *Vice President;* and Dr. Richard E. Palmer, reëlected *Secretary.*

New staff officers for the Arlington Hospital are:

Dr. Alfred M. Palmer, Falls Church, Va., *President;* Dr. Clifford E. Bagley, *Vice President;* and Dr. K. C. Latven, *Secretary.*

Most of these officers are Associate members of the District Medical Society; Dr. Bagley is an Active member of the Society.

ATTENTION: READERS

Look for a new series of articles in the ANNALS beginning next month, CONCERNING THOSE WHO WORK WITH US. This series of articles is designed to acquaint physicians with the activities and problems of those in the ancillary branches of medicine, i.e., dentists, pharmacists, podiatrists, nurses, medical technicians, and opticians

Dr. Howard T. Karsner, Research Adviser to the Surgeon General of the Navy, was honored, December 5, by receiving the Centennial Award of Northwestern University. The awards were presented at the Centennial Convocation held on the University campus, December 2, 1951.

The recipient was one of a hundred persons honored who now live or did live in one of the six states of the original Northwest Territory. The award reads in part, ". . . in recognition of the impress which he has made during a lifetime of distinguished service as a resident of one of the states which comprised the Northwest Territory."

From 1914 to 1949, prior to accepting his present position, Dr. Karsner was Professor of Pathology at Western Reserve University. He is President of the National Board of Medical Examiners; Chairman of the Committee on Pathology, Division of Medical Sciences, National Research Council; and a member of many medical and other scientific organizations, including the District Medical Society, in which he holds Associate membership. He is an Honorary member of the Society of Anatomy of Brazil and the Society of Pathology of Argentina.

Dr. Karsner has written and published over 250 scientific papers. He is the author of a widely used textbook, "Human Pathology," which is now in its seventh edition.

Dr. Charles M. Griffith, Manager of **Mt. Alto Veterans' Administration Hospital** since 1945, retired, December 31, after more than 34 years of Government service. **Dr. Linus A. Zink,** former Manager of the new Brooklyn, N.Y., Veterans Hospital, was selected to succeed Dr. Griffith.

Dr. Griffith is a graduate of the University of Tennessee School of Medicine. He served in the

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Army Medical Corps during World War I. After a short period in Public Health Service, he affiliated with the Veterans Administration in 1924. From 1931 to 1945 he was Director of Medical Services for VA.

Calendar of Meetings, November 16—December 15, 1951

November 16	Subcommittee of Committee on Medical Care
November 17	Washington Psychoanalytic Society
November 19	Coöperation with D. C. Bar Association
November 20	Grievance Committee
November 23	Special Committee on Health and Accident Insurance
November 26	Executive Board District Society of Anesthesiologists
November 27	Membership Luncheon Subcommittee on Child Welfare
November 28	Washington Heart Association
December 1	Washington Psychoanalytic Society
December 3	Committee on Scientific Program
December 4	Registered X-ray Technicians of Washington Women's Medical Society
December 5	Executive Board, Woman's Auxiliary Georgetown University Medical Alumni Association Medical Care Services for Civil Defense Graduate Nurses' Association
December 6	Section on Neurology and Psychiatry Executive Committee, Gallinger Hospital Graduate Nurses' Association
December 7	Special Committee on Health and Accident Insurance
December 10	Committee on Blood Banks Committee on Scientific Program Board of Censors
December 11	House Committee Medical Officers' Reserve Units
December 12	Woman's Auxiliary Board of Censors Medical Care Services for Civil Defense
December 13	Washington Psychiatric Society Subcommittee on Mental Health
December 14	Board of Censors

Dr. Zink, a graduate of Ohio State University School of Medicine, served with the Army Medical Corps during World War II. He was separated from the service as a Lieutenant Colonel. He was Clinical Director at Alexandria (La.) VA Hospital until his transfer to Brooklyn in 1949.

Dr. William Warren Sager, who died in Richmond, Virginia, September 10, 1951, will be memorialized by the establishment of a research fund for paraplegia subscribed to by his colleagues, nurses, and former patients. Dr. Sager himself was a paralysis victim. From November, 1949 until his death he served as chief of the cord injury service at the Veterans Administration Hospital in Richmond; during that time he was confined to a wheelchair.

The fund, to be used in furthering research in the field of spinal paralysis, will be administered by the National Paraplegia Foundation. The initial contribution to the fund was made by the Virginia Chapter of Paralyzed Veterans of America, members of which are present or former patients of the Richmond Hospital.

Dr. Sager was Associate Clinical Professor of Surgery at George Washington University for nearly 20 years. Enlisting for service in the U. S. Navy during World War II, he headed the general surgical section of the Navy Medical Center in Bethesda, Md., and later served as chief of surgery aboard the hospital ship *U. S. S. Sanctuary*. He held the rank of Commander.

Dr. Edward B. Tuohy, Professor of Anesthesiology at Georgetown University School of Medicine since 1947, resigned his position with the University as of November 19. **Dr. Theodore A. Guenther,** Assistant Professor of Anesthesiology, was named to succeed Dr. Tuohy.

Dr. Tuohy received his academic degree from the University of Minnesota and his degree in medicine from the University of Pennsylvania. He held a fellowship at the Mayo Clinic from 1933 to 1935. During World War II he served for three years, 1942 to 1945, at the Percy Jones General Hospital in Battle Creek, Michigan, and was separated from service with the rank of Major. He is a diplomate of the American Board of Anesthesiology; in 1947 he was President of the American Society of Anesthesiologists.

Dr. Guenther, a native of Omaha, Nebraska, received his medical training at the University of Michigan. Like Dr. Tuohy, he studied anesthesiology at the Mayo Clinic, from 1943 to 1945 and again from 1946 to 1947. He became a member of the Georgetown staff, when the new Hospital was opened in 1947, as Associate in the Department of Anesthesia.

Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital, **and Dr. Harvey J. Tompkins,** Chief of the Psychiatry and Neurology Division, VA Department of Medicine and Surgery, were among the 12 United States delegates to the Fourth International Congress on Mental Health, which convened in Mexico City, December 11–19, 1951. The Chairman of the delegation was Dr. Robert H. Felix, Director of the National Institute of Mental Health, PHS.

Colonel Joe M. Blumberg, MC, USA, addressed the Washington Society of Pathologists, January 10, at the Army Medical Service Graduate School, Walter Reed Army Medical Center. His subject was "The Pathogenesis of Lung Carcinoma." Other speakers were Drs. J. B. Horrell and John S. Howe, of Veterans Administration Hospital, and Dr. Lalla Iverson, of the Armed Forces Institute of Pathology.

Dr. Murray M. Copeland attended the 37th Annual Clinical Congress of the American College of Surgeons in San Francisco, Calif., November 5 to 9. During the meeting he participated in a panel discussion on "Nonmalignant Lesions of the Breast."

Dr. Copeland attended the meetings of the Southern Surgical Association in Hot Springs, Va., December 4–6.

Dr. Wallace M. Yater, Theodore Wiprud, and A. Louise Eckburg, of the editorial staff of the Medical Annals, attended the two-day State Medical Journal Conference in Chicago, November 12 and 13. The meetings were held at the headquarters of the American Medical Association.

Dr. Yater and Mr. Wiprud participated in the program. Dr. Yater's discussion on the make-up of a journal followed an address on "The Job of an Editor" by Dr. Walter Kahoe, Director of the Medical Department of J. B. Lippincott Company. Mr. Wiprud was moderator during the Monday afternoon session. He introduced Mr. Harry L. Shaw, General Editor of Harper and Brothers, who spoke on "Literary Aspects of Medical Journalism," and Mr. Lester L. Hawkes, Associate Professor of Journalism, University of Wisconsin. The latter discussed "Mechanical Make-up of the Journals."

On Monday evening, registrants at the Conference were guests of Luziers, Inc., at a reception preceding dinner in the Walnut Room of the Bismarck Hotel, where they were guests of the American Medical Association.

Captain George N. Raines, MC, USN, a Director of the American Board of Psychiatry and Neurology, participated in the Board examinations which were conducted in New York City, December 16–18. He also attended the meetings of the Association for Research in Nervous and Mental Diseases which were held in the same city just prior to the Board meetings.

Mr. James G. Caposella, Administrator of **Emergency Hospital** for the past nine years, has tendered his resignation to the Board of Directors of the Hospital, effective May 1, when his present term expires. Mr. Caposella came to the Hospital in 1938 as Assistant Administrator and was named Administrator in 1942.

Dr. Walter Freeman returned to Washington, December 15, after a fortnight of traveling and lecturing in Florida, Cuba, Curaçao and Puerto Rico. At Bay Pines, Florida, he addressed the Pinellas County Medical Society on "Transorbital Lobotomy for the Relief of Pain." In the same city he spoke on "Climate in Multiple Sclerosis" before the medical staff of the Veterans Administration Hospital.

He gave two addresses before the Puerto Rico Medical Society, one on "Transorbital Lobotomy for the Relief of Physical and Mental Pain" and the other on "Technics of Transorbital Lobotomy." He lectured on the same subjects in Curacao and Cuba.

Rear Admiral Lamont Pugh, Surgeon General of the Navy, was honored on December 1 in ceremonies held at Wagner College, Staten Island, New York, when the College bestowed upon him the honorary degree of Doctor of Laws. Following the ceremonies the Surgeon General and his party attended a dinner given by the President of the College and his wife, Dr. and Mrs. Walter Consuelo Langsam.

Dr. Frederick J. Balsam has been made Assistant Chief in the Department of Physical Medicine and Rehabilitation at the Kennedy General Hospital in Memphis, Tenn. He has also been appointed to the Editorial Board of the Journal of the Association for Physical and Mental Rehabilitation.

Dr. Daniel L. Seckinger, District Health Director, will head solicitation in the District Government for the 1951–52 fund drive of the Arthritis and Rheumatism Foundation. The Foundation is seeking 50,000 new members for the District Chapter.

Word of some new assignments and activities of Medical Society members in service has reached the Executive Offices.

Colonel John F. Dominick, MC, USAF, has been assigned to headquarters of the U. S. Air Force in Europe, where he will be Chief of the Professional Services Division. His former duties as Chief of the Medical Consultants Division for the Office of the Air Force Surgeon General have been assumed by Colonel Oscar S. Reeder.

Colonel William H. Beard, MC, USAF, is now stationed at Newcastle County Airport, Wilmington, Delaware. Colonel Beard was called back into service on February 1, 1951, and has served in Central America and the Caribbean Area.

Lt. Colonel Francis D. Threadgill, MC, USA, is presently stationed at Fort Ord, California, and assigned to the Orthopedic Section.

Major Brooks G. Brown, MC, USA, visited the Society's offices on December 19. He was home for the Christmas holidays and has returned to duty with the 382nd General Hospital in Japan.

Captain A. Jacobson, MC, USA, has been assigned to overseas duty. He is Chief of the Neuropsychiatric Service of the 141st General Hospital.

Dr. Lucian Bauman was recently certified by the American Board of Ophthalmology.

Dr. Frederick D. Mott, who has served as Deputy Minister of Public Health of Canada, with offices in Regina, Saskatchewan, has returned to Washington; his offices are located at 1427 Eye Street, N.W.

Dr. Charles H. Nash, Jr. has moved to Lubbock, Texas, where he is practicing at 1318 Main Street. While in Washington Dr. Nash was Chief Medical Officer in the Department of Obstetrics and Gynecology at Gallinger Municipal Hospital.

Dr. R. Stevens Pendexter has sent the Secretary of the Medical Society a new address, 9 LeJeune Court, Old Greenwich, Conn.

WOMAN'S AUXILIARY NOTES

The Eighth Annual Conference of State Presidents, Presidents-elect, and National Committee Chairmen of the Woman's Auxiliary to the American Medical Association was held in Chicago at the Hotel LaSalle on November 14 and 15. Included in the plan of the Conference were nine panel discussions, for which the National Chairmen were Moderators and State Presidents, participants.

Mrs. Edgar E. Quayle, National Legislation Chairman, was moderator for the panel discussion on "Legislation and Americanism." The moderators were responsible for the panels, which proved most interesting and informative.

Mrs. Richard E. Dunkley was assigned to the Finance Committee Panel and spoke on "The Importance of Records—the Financial Record System for a State Auxiliary."

The Woman's Auxiliary as a local group has had a full calendar this past half-year. Each week has been filled with varied activities of work and recreation.

The standing and special committees have been in full swing and have presented extremely interesting programs.

Under the chairmanship of Mrs. Jonathan M. Williams, the Educational Committee is handling for the Auxiliary the financial aid for nurses' training. Currently, there are two trainees at Gallinger Municipal Hospital and two at Garfield Memorial Hospital receiving this help.

The Philanthropic Committee, under the chairmanship of Mrs. W. Bryan Orr, has maintained a booth for the sale of Tuberculosis Christmas Seals.

Mrs. Richard H. Todd, Chairman of the Public Relations Committee, is outlining with the Civil Defense Committee of the District of Columbia the role of the Auxiliary during Civil Defense Week, which will be held early in 1952. A guest speaker will address the Auxiliary on this subject at its regular meeting in January.

The Ways and Means Committee, Mrs. John E. Morris, Chairman, has plans for a spring dance. The proceeds from this dance will be used for an educational project next year.

Mrs. Lawrence A. Rapee reports that the Membership Committee will sponsor a tea for new members to be held in January.

The House Committee, Mrs. Howard A. Donald, Chairman, has served tasty and attractive luncheons following the regular meetings. The Christmas decorations for the December meeting were unusually lovely.

A special committee under Mrs. Harry Lewis has hung new curtains in the library.

The activities of the Social Committee, Mrs. M. Noel Stow, Chairman, have covered a wide range of interests. The Bowling League, under Mrs. Duane Richtmeyer, meets weekly. Twelve teams made up of 60 members are competing in a tournament which will end in the spring.

Mrs. Francis J. O'Bryan made arrangements for the Spanish lessons which are conducted weekly; Mrs. Robert Taylor, for classes in Latin American dances; and Mrs. Leo Varden, for bridge lessons.

Mmes. Joseph Bailey, David Nolan, William Moses and Charles Jones will assist the Social Chairman, Mrs. Stow, on plans for further activities in the spring. Courses in flower arrangement and self-improvement are anticipated.

Each regular meeting has had interesting speakers. These programs have been the responsibility of Mrs. Herbert H. Schoenfeld.

Mrs. Samuel A. Alexander, National Convention Delegate, accompanied her husband on a trip to Honolulu to the triennial meeting of the Pan Pacific Surgical Association Congress, November 7–19. While there she was invited to attend a meeting and luncheon of the Executive Board of the Auxiliary.

MRS. ALAN FRANK KREGLOW
Publicity Chairman

BOOK REVIEWS

The Battle of the Conscience: A Psychiatric Study of the Inner Working of the Conscience. EDMUND BERGLER, M.D. Price, $3.75. Pp. 296. Washington, D. C.: Washington Institute of Medicine, 1948.

Taking for his thesis the belief that "everyone has an inner conscience and is constantly under the influence of that inner department of the personality," Bergler discusses, in 16 chapters, the various aspects of conscience and the many manifestations of neurotic guilt. He divides the Super Ego into two parts, the Ego Ideal and the Daimonion, borrowing the latter term from Socrates, and identifying the Daimonion with the "Thou shalt not" attitude of the Super Ego as contrasted with the "Thou shalt" attitude of the Ego Ideal. Using a legal figure, he compares the Id to the accused, the Ego to an attorney for the defense, and the Super Ego to a District Attorney or Prosecutor, the whole process being coördinated with Freud's Eros-Thanatos theory—the opposition of the life and the death instincts. He carries this legal figure into his discussion of normal and neurotic inner feeling of guilt, using numerous clinical examples, and sets out schematically a nine-point differentiation between normal and neurotic aggression—since aggression is one of the most frequent guilt-producing factors—with illustrative textual comment and examples.

A chapter on typical examples of neurotic guilt is followed by one on what the author calls the "Injustice Collectors," which is concerned with neurotics' constant unconscious construction of situations in which they are disappointed and "mistreated," and which involves what he terms the "mechanism of orality," a concept of his own by which he traces the genesis of the largest part of neurotic conflict to the oral phase of infantile development.

Normal antidotes for guilt are discussed under the headings of Tender Love, Work, Sublimation, Rationalization, and what the author calls "Pathos," a term borrowed from the Greek and which "has no connection with the usual connotation of pity." With respect to Sublimation, he describes a five-layer process of psychic impulse and reaction, only the fifth layer representing the culmination of conflict in the sublimating activity. Several clinical illustrations of this process are given. Contrasted with these normal antidotes for guilt are the neurotic ones, Cynicism, Hypocrisy, and Self-Derision, likewise illustrated by numerous clinical examples. Separate chapters are devoted to the relation between Identification and Inner Guilt; to depression following upon success, which involves conflicts with conscience; and to several other manifestations of unconscious guilt, including dreams and insomnia.

The relation between unconscious guilt and criminal activity is the subject of a long chapter in which Bergler compares the "Mechanism of Orality in Neurosis" with the "Mechanism of Criminosis." This chapter also contains references to and comments on the work of several other psychoanalysts who have concerned themselves with the study of crime.

The volume cannot fail to be a revelation to the individual who thinks of guilt and conscience as comparatively simple matters, for the author has demonstrated convincingly their diversity, complexity, and many unsuspected ramifications. Like many analysts who postulate a pet theory, he appears to be somewhat dogmatic where the "mechanism of orality" is concerned, attributing to it a universality which many other authorities may be disinclined to accept; but his approach is invariably constructive and humanitarian, and the book is almost equally productive of stimulating thought for both the psychiatrist and the lay worker. It is to be regretted, however, that a work which deals with so many aspects of a single subject has not been provided with an index.

Valentine Ujhely, M.D.

Investments for Professional People. Robert U. Cooper, B.P.E., M.A., M.D. Price, $4.00. Pp. 342. New York: Macmillan, 1951.

The author is a physician who has written this book primarily for the members of his own profession, although he states that there are many problems common to all professional people. It is of great value to the professional man at any stage of his career, but most especially to the interns and residents. Hence this book should be available to the house staffs of all hospitals and should be in the libraries of medical schools and physicians.

The first half of the book is valuable to an individual who is just beginning his professional career. In the most simple and positive language, the author discusses the location of an office, its equipment and personnel, and the importance of keeping accurate financial records. He takes up the troublesome problem of ascertaining appropriate and just fees. He demonstrates himself superb at simplifying and making readable the rules and regulations regarding the income tax. He emphasizes repeatedly the importance of keeping accurate records and being familiar with the legal definitions of income and of permissible deductions. He contends that every physician should be able to fill out his own income tax returns because he is held responsible regardless of assistance.

The author treats the insurance problem in a most rational manner. He demonstrates the necessity of insurance during the early part of one's career to afford adequate security. He insists that the professional man should utilize his own analytical ability that his business endeavors may be adjusted to his own needs. He is aware that the young physician has spent many years and much effort to acquire his profession, and that he has become accustomed to accepting the statements of medical authorities. He emphasizes that this attitude should never be adopted in the business world, because every salesman is apt to benefit by the proposed business transaction and therefore he might be biased in his eagerness to make the sale. Furthermore, the salesman may not be familiar with or conscientious regarding the requirements of the professional man.

The author defines the advantages of banking facilities, and urges that the physician take advantage of the various consultation services.

The first 4 chapters of the book constitute primarily a primer to aid the readers to understand the problems inherent to professional careers. The last 7 chapters are dedicated to the more secure and successful professional man. In the latter part of the book the author assumes that the individual has been successful and has surplus money for investments. He discusses the characteristics affecting the value of real estate and suggests a scientific method of appraisal. He indicates that few physicians have the experience to become acquainted with real estate and therefore they must depend to a large extent upon consultants, but he does give a formula for inspection and for determining approximate values.

One of the most instructive parts of the book consists of analysis of financial statements. He contends that every professional man has the ability to analyze a financial statement and should take the time to do so. He forms a hypothetical company and develops the financial statements during the various periods of its growth.

The author has defined bonds, preferred stocks, and common stocks. He has pointed out the relative merits of each. He has attempted to familiarize the reader with investment funds and with special investment opportunities, including the hazards of a professional man to own a farm, especially if his only qualifications consist of adequate funds to make the purchase

He emphasizes the importance of making a will. He points out the value of distributing an estate in part during life.

The last section of the book deals with the investment program and constitutes a challenge to the reader to analyze himself. He thinks that if an individual cannot take risks without a mental hazard, then he should invest his money more securely, such as in Government bonds.

Dr. Cooper has demonstrated a rare ability to make problems attractive and to use simple but forceful language. This book represents excellent reading. The author has intended that this book should be merely an introduction to the problems of investment; he has attempted to stimulate the professional man to think in terms of making investments with intelligence and without emotion. This book will certainly broaden the horizon of the business knowledge of any physician who cares to read it. This reader regrets that this book was not available to him 20 years ago. He feels sure that had this been the case, he would have avoided some poor investments. Dr. Cooper has responded to a great need that exists among professional people, and his book merits many editions.

O. Hugh Fulcher, M.D.

CORRESPONDENCE

Chicago, Illinois, November 27, 1951

To the Editor:

In the October issue of *Medical Annals of the District of Columbia*, on page 558, there appears a statement to the effect that "at least one Blue Shield Plan is now underwritten by several large insurance companies."

I believe you will find this statement to be in error, because none of the Blue Shield Plans are so underwritten.

One of the strictly enforced Membership Standards of this organization, to which Blue Shield Plans belong, is the requirement that each plan be operated on a nonprofit basis. If a plan were to be underwritten by a commercial insurance company, this would constitute a violation of that standard.

Therefore, your statement seems to be in error, and I would appreciate your calling this to the attention of your readers.

Sincerely yours,
Frank E. Smith
Director, Blue Shield Medical Care Plans

The Observer's Reply:

Mr. Smith is right and Y.O. stands corrected. Wisconsin has two prepayment plans: one, the State Medical Society's Wisconsin Plan, which utilizes private insurance companies; the other, the Wisconsin Physicians' Service, also sponsored and approved by the State Medical Society, a Blue Shield Plan. The error occurred because Y.O. thought of the two plans as one.

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additional current books which, in their opinion, merit comment.

Plastic Surgery of the Nose Including Reconstruction of War Injuries and of Deformities from Neoplastic, Traumatic, Radiation, Congenital, and Other Causes. James Barrett Brown, M.D., Professor of Clinical Surgery, Washington University School of Medicine, St. Louis, Mo.; Chief Consultant in Plastic Surgery, United States Veterans Administration, Washington, D. C.; formerly Senior Consultant in Plastic Surgery, United States Army and in E.T.O., and Chief of Plastic Surgery, Valley Forge General Hospital, and Frank McDowell, M.D., Assistant Professor of Clinical Surgery, Washington University School of Medicine, St. Louis, Mo. Price, $15.00. Pp. 427, with 379 illustrations, including 48 in color. St. Louis, Mo.: Mosby, 1951.

Untoward Reactions of Cortisone and ACTH. A Monograph in American Lectures in Internal Medicine. Vincent J. Derbes, M.D., F.A.C.P., Associate Professor of Medicine, Tulane University of Louisiana School of Medicine; Head of Department of Allergy, Ochsner Clinic; Visiting Physician, Charity Hospital of Louisiana at New Orleans; and Staff Member, Foundation Hospital, New Orleans, Louisiana, and Thomas E. Weiss, M.D., Instructor in Medicine, Tulane University of Louisiana School of Medicine; Member of Department of Medicine, Ochsner Clinic; Visiting Physician, Charity Hospital of Louisiana at New Orleans; and Staff Member, Foundation Hospital, New Orleans, Louisiana. Edited by Roscoe L. Pullen, M.D., Director, Division of Graduate Medicine, The Tulane University of Louisiana, New Orleans, Louisiana. Price, $2.25. Pp. 77. Springfield, Ill.: Thomas, 1951.

Biological Antagonism, The Theory of Biological Relativity. Gustav J. Martin, Sc.D., Research Director, The National Drug Co., Philadelphia, Pa. Price, $8.50. Pp. 516, with 64 figures and 44 tables. New York & Philadelphia: Blakiston, 1951.

The Rockefeller Foundation Directory of Fellowship Awards for the Years 1917–1950. The Rockefeller Foundation, with an Introduction by Chester I. Barnard, President of the Foundation. Pp. 286. New York: The Rockefeller Foundation, 1951.

Annual Report on Stress. HANS SELYE, M.D., PH.D. (Prague), D.Sc. (McGill), F.R.S. (Canada), Professor and Director of the Institut de Médecine et de Chirurgie expérimentales, Université de Montréal. Price, $10.00. Pp. 644, with illustrations. Montreal, Canada: Acta, Inc., 1951.

Textbook of Refraction. EDWIN FORBES TAIT, M.D., PH.D., Associate Professor of Ophthalmology, Temple University School of Medicine; Attending Surgeon (Ophthalmology), Temple University and Montgomery Hospitals; Fellow, Philadelphia College of Physicians, and American Academy of Ophthalmology and Otolaryngology; Member, The Pan-American Association of Ophthalmology, and The Association for Research in Ophthalmology. Price, $8.00. Pp. 418, with 93 figures. Philadelphia: Saunders, 1951.

CHARLES MIDDLETON BEALL, M.D.

(1877–1951)

AN APPRECIATION

> His life was gentle, and the elements
> So mix'd in him, that Nature might stand up
> And say to all the world, "This was a man!"

A man and a gentleman—that was Dr. Charles Middleton Beall. He was not showy or spectacular; but that did not detract from his worth. He was quiet, unassuming, unobtrusive, dignified; but nevertheless he was a man of firmness and force, thoroughly honorable and dependable, as substantial and strong as the Rock of Dumbarton, the toponym of his race. His life was really gentle; he was genial and companionable, and he faced the world with quiet humor. His character and personality endeared him to his friends, and won for him general esteem and appreciation. Daily association with him for thirty years inspired keen affection. Such as he are the type of the ideal physician, earning the gratitude and admiration of the community for able, faithful, and selfless service in its behalf, the type in which physicians take pride and which establishes the spirit and idealism of the medical profession.

Dr. Beall was not only a native and lifelong resident of the District of Columbia, but his ancestral roots extended clear back through that region to the beginnings of its colonial history. The original progenitor of the family was Colonel Ninian Beall (1625–1717), a famous and colorful figure who was one of the principal founders of the province of Maryland. A Scottish soldier in the Royalist army which was defeated by Cromwell at the battle of Dunbar, he was transported to Maryland about 1655, and there attained high and active position in the service of the province, notably commander-in-chief of the provincial military forces, member of the Assembly, successful negotiator with the Indian tribes. He acquired ownership of many large tracts of land, aggregating more than 25,000 acres, and including 795 acres styled the "Rock of Dumbarton" on which the city of Georgetown was subsequently established. He had a host of descendants, estimated at 70,000 in number, and including four governors of Maryland.

Born September 22, 1877, Dr. Beall was the son of Charles B. Beall, deputy clerk of the United States Supreme Court, and Adelaide Ricketts Beall; and he was first cousin of the brothers Drs. D. Olin Leech and Frank Leech, prominent and popular physicians of Washington. He was educated in the Columbian Preparatory School and the Columbian Medical School (now the George Washington University), from which he graduated in 1900 with the degree of Doctor of Medicine. In his youth Dr. Beall was a famous baseball player, and his prowess in that sport is still remembered. In selecting his life career he considered three possibilities, professional baseball, a job in the Naval Gun Factory, and medicine. In the profession which he wisely selected he engaged with ability and success. In addition to active private practice, he served as inspector in the District Health Department, a member of the staff of Garfield Memorial Hospital, and from 1920 as Assistant Medical Director of Acacia Mutual Life Insurance Company. In all these fields he manifested marked ability, reliability, and wise judgment.

Dr. Beall's latter years were full of illness, misfortune, and tragedy, domestic and personal. His wife died as a result of injuries incurred in saving the life of a child in an automobile accident. His young grandchild died suddenly and unexpectedly. There was protracted and serious illness in his family. From 1944 Dr. Beall himself was a victim of leukemia, with prolonged and intense sufferings and prostration. In spite of his distressing and disabling symptoms, however, he insisted on continuing his accustomed daily duties and activities with a spirit, persistence, and energy which were the amazement and admiration of his friends. Dr. Beall's death, on November 20, 1951, was euthanasia, a merciful release from suffering.

John B. Nichols, M.D.

CUSTIS LEE HALL, M.D., F.A.C.S., F.I.C.S.

(1888–1951)

A Tribute

"We of the Washington Orthopedic Club mourn the loss of our internationally famous member and president, but we feel profoundly grateful for having had the privilege of knowing this great man. . . . He will remain forever in our memories, not alone as a distinguished physician and educator, but, above all, as a friend and counsellor."

Dr. Custis Lee Hall, internationally known Washington orthopedic surgeon, died on Saturday, November 10, 1951, at Doctors Hospital following a brief illness.

Dr. Hall was born in Washington, D. C., July 15, 1888. He received his early education in the public schools of the Nation's Capital and graduated from George Washington University School of Medicine in 1912. Internships followed at Garfield Memorial and George Washington University hospitals, with a residency in orthopedics at Massachusetts General Hospital, Boston.

Dr. Hall served with the British and American Expeditionary Forces in World War I. He was a Major in the Medical Corps of the United States Army when he returned to Washington. He immediately entered private practice, specializing in orthopedics. As the years passed his prestige grew among the medical profession and he became one of the best known orthopedic surgeons in the United States.

He was Chief of the Division of Orthopedic Surgery at Doctors Hospital from 1941 until his death. He held a similar post at Garfield Memorial Hospital and was a consultant at Mt. Alto Veterans Administration Hospital. For the past 35 years he had been orthopedic surgeon on the staff of Children's Hospital.

Dr. Hall had long been a member of the faculty at George Washington School of Medicine. He was Professor of Orthopedic Surgery from 1920 to 1933 and Clinical Professor of Surgery from 1933 to the present time.

Always deeply interested in medical organization, he was an active and interested member of the Medical Society of the District of Columbia from the time of his election in 1917. He served on various committees and was First Vice President of the Society in 1943–44. He was President of the Ambulatory Fracture Association in 1938. In the same year he became President of the United States Chapter of the International College of Surgeons. At the time of his death he was Vice President of the International College of Surgeons and President of the Washington Orthopedic Club.

CUSTIS LEE HALL, M.D.

Dr. Hall was a diplomate of the American Board of Orthopedic Surgery; a Fellow of the American Medical Association and the American College of Surgeons; a member of the Washington Academy of Surgery, the Washington Academy of Medicine, the American Academy of Orthopedic Surgeons, the Pan American Medical Society, the Southern Medical Association, the Southeastern Surgical Society, and the American Therapeutic Society.

Among his other affiliations were memberships in the Smith-Reed-Russell Society of George Washington University, Sigma Xi fraternity, the Army and Navy Club, the Columbia Country Club, the Kiwanis Club, and the Seigniry Club (Canada). He was a Mason, a Knight Templar, and a Shriner.

Perhaps none of his professional activities received wider public recognition than the medical treatment he provided crippled children under the sponsorship of the Underprivileged Child Committee of the Kiwanis Club. In 1936 he was presented the *Washington Times* Award for outstanding service to the people of the District of Columbia. The award was presented to him by the then District Commissioner Melvin C. Hazen.

Dr. Hall is survived by his wife, Mrs. Mary Golden Hall; a son, Custis Lee Hall, Jr.; and two daughters, Miss Elizabeth Hall and Miss Nancy Hall, all of 3920 Harrison Street, N. W. Another daughter, Mrs. Thomas Klein, of Rosemont, Pennsylvania, and a sister, Mrs. C. F. Haynsworth, of Greenville, South Carolina, also survive him.

Electrophoresis—Reiner

(*Continued from page 16*)

17. Pauling, L., Itano, H. A., Singer, S. J., and Wells, I. C.: Ibid., 1949, **110**, 543.
18. Stern, K. G., Reiner, M., and Silber, R. H.: J. Biol. Chem., 1945, **161**, 731.
19. Fenichel, R. L., Watson, J., and Eirich, F.: J. Clin. Investigation, 1950, **29**, 1620.
20. Silver, S., and Reiner, M.: Bull. New York Acad. Med., 1950, **26**, 277.
21. Sterling, K.: Bull. New England M. Center, 1951, **13**, 121.

"That Full Feeling"—Gibb

(*Continued from page 22*)

to if the circumstances prevailing were entirely to their liking. Reassurance, patience, simple medication of the so-called antispasmodic variety, and a sensible, well balanced diet will do wonders.

In summary, this sensation of fullness and satiety after a few bites is usually purely functional in origin. It is a real, not an imagined feeling, and is caused by the tonus of the body of the stomach not decreasing when food enters the fundus. Food remains in the fundus and slightly overdistends it, thereby doing away with the feeling of hunger. The tonus of the body and that of the fundus are different, being less in the latter.

Perforation of Fish Bone into Portal Vein-Widome

(*Continued from page 25*)

COMMENT

Apparently the cause of this patient's initial pain, a month prior to admission was the fish bone in the act of perforating or embedding itself in the wall of the duodenum. The septic course was brought on following actual perforation into the portal vein.

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THE CANCER PROBLEM*

GEOFFREY HADFIELD, M.D., F.R.C.P.

Professor of Pathology, Royal College of Surgeons, London

I WELCOME the opportunity which this occasion provides to thank you for the honor you have done me in inviting me to address your Society.

I sail for England toward the end of November, and by that time I shall be one of many Englishmen who have been privileged to study without let or hindrance the general pattern and purpose of North American civilization. I shall have enjoyed your warm hospitality, and I sincerely hope I shall have been able in some small measure to strengthen the links which bind our two nations together.

I should like to talk to you today about cancer research, which has two distinct aspects, clinical and experimental.

With regard to the first, I would be insulting your intelligence if I attempted to stress its supreme importance, but I should like to offer my opinion that, in our present state of ignorance of the basic cause of cancer, intense research into all and every method which may facilitate early recognition of the disease transcends every other type of cancer research and is paying huge dividends in saving life and alleviating suffering.

There is a tendency at present to decry the experimental approach to the cancer problem chiefly because the two types of research have been moving along parallel lines and failing to meet. I should like to stress this point strongly because I believe we must check it. This state of affairs is partly due to the fact that the laboratory worker, using the experimental animal as his test-object, has developed the habit of publishing his results in highly technical language which his clinical colleague finds difficult to understand. He is also unwilling to leave his ivory tower and explain his methods, aims and objectives to common men.

The remedy for this is to establish closer liaison between the two classes of workers. They must work in close proximity with each other, and the liaison officer who brings them together must be a man who has great sympathy and considerable understanding of both aspects of the problem. Before coming to Washington I spent some time at the Memorial Center, New York, and I believe that Dr. Rhoads, the Director of that Center, has achieved this difficult task and to the best of my knowledge is the only man in the world who has so succeeded.

There is another reason why the physician and surgeon is sometimes impatient of the methods of the experimentalists. Many sane and well balanced clinicians have a deep conviction that what happens in mice does not of necessity happen in man, and there is more than a grain of truth in this instinctive belief.

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* Presented at the George Washington University Medical Society Luncheon, October 3, 1951, during the Twenty-second Annual Scientific Assembly of the Medical Society of the District of Columbia.

Let me remind you of the great discovery of Kennaway, the English cancer research worker, who isolated a series of chemical substances from the high temperature distillate of coal tar capable of producing malignant growths in small mammals in every tissue of their bodies and in very small doses. In the rhesus monkey, on the other hand, those compounds are almost impotent, and in man tar cancer is slow-growing and readily amenable to treatment. This does not mean that a mouse cancer differs in any fundamental way from human cancer. There is no doubt whatever that they are biologically identical. The difference lies in the responsiveness of mouse tissue and the failure of monkey tissue to respond to a particular cancer-producing agent.

I should now like to give you a general impression of the lines along which the more promising experimental work is progressing. We are almost completely ignorant of the basic reason why certain cells in the body assume malignancy, and in this sense we do not know the cause of cancer. Does this constitute a valid reason why we should not attempt to kill cancer cells if we can find a lethal agent to which they are susceptible while the rest of the body cells are immune? The malarial parasite is a living cell, but malaria was treated successfully by quinine long before the parasite was discovered.

I believe this line of attack to be the most promising under investigation. Let me give you an example. Acute encephalitis is often due to infection by a filter-passing virus, of which there are quite a large number of varieties. Many of these have been studied, and one group of them has been found which produce very mild and transient effects in small mammals but are highly lethal to the cells of an engrafted malignant tumor in these animals.

Is it unreasonable to hope that a virus will eventually be found which will enter and destroy human cancer cells, leaving the normal cells of the body unharmed? I believe that we are in sight of success in this direction. The search for agents which have this property of selective lethality has been made among chemical substances which normal cells need for normal growth and function. The substances investigated have been certain amino acids and a group of nucleic acids. Groups of atoms are substituted into the molecules of those acids without materially altering their basic structure. They are in fact so little altered that normal cells take them up out of the blood stream, and in animals carrying a malignant growth the cancer cells do so too. Some compounds have been found which are harmless to normal cells but by virtue of the substituted chemical groupings are highly lethal to cancer cells. This is a vast field for research, but in view of the success of the fundamental experiments it is certainly not unreasonable to hope that with patience and determination the ideal selective killing agent will eventually be found.

In giving you these examples I have hardly scratched the surface of the possibilities of experimental cancer research and I believe our two countries have the right men, and these men have the optimism and determination to pursue this laborious problem to the bitter end. I need not remind you that this would not be the first time our two nations have brought a long struggle to a successful ending.

SYMPATHOMIMETIC AMINES IN THE TREATMENT OF PERIPHERAL CIRCULATORY FAILURE*

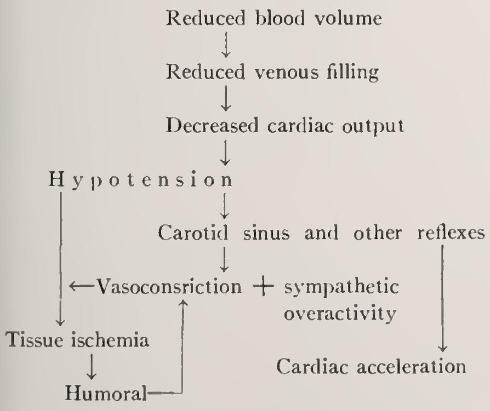
A. M. LANDS, Ph.D.
M. L. TAINTER, M.D., *Director*

Sterling-Winthrop Research Institute, Rensselaer, N. Y.

FEW PROBLEMS in medical research have received more attention than those associated with the shock syndrome. The sudden and often dramatic appearance of this phenomenon with frequently fatal consequences has presented emergencies requiring prompt remedial treatment. The selection of adequate therapeutic measures requires reasonably accurate knowledge of the physiologic condition of the patient and particularly of the kind and extent of cardiovascular changes that are taking place. Blalock[1] has divided shock or peripheral vascular failure into 2 main groups, neurogenic or primary shock and hematogenic or secondary shock. This latter group involves many complex physiologic changes and will, therefore, be considered first.

Extensive burns, trauma incidental to surgery, or accidents or hemorrhage may induce a train of events which if not interrupted will result in irreversible shock and death. Blalock[1] and Page[2] have listed these events in the following order:

SHOCK FROM HEMORRHAGE



Prolonged ischemia brings about changes which appear to be irreversible.

Let us consider briefly the evidence leading to the above generalizations. Painful or disagreeable sensations initiate peripheral vasoconstriction. Freeman et al[3] have determined the effect of pain on the volume flow of blood through the hand under carefully controlled conditions (see figures 1, 2 and 3). In these experiments pain was produced by the inflation of a balloon which had been introduced through an ileostomy opening. This caused a marked reduction in blood flow which lasted for as long as the cramps persisted. Similar reductions in peripheral flow have been observed in emotional states, such as fear, embarrassment, disgust, anxiety and annoyance.

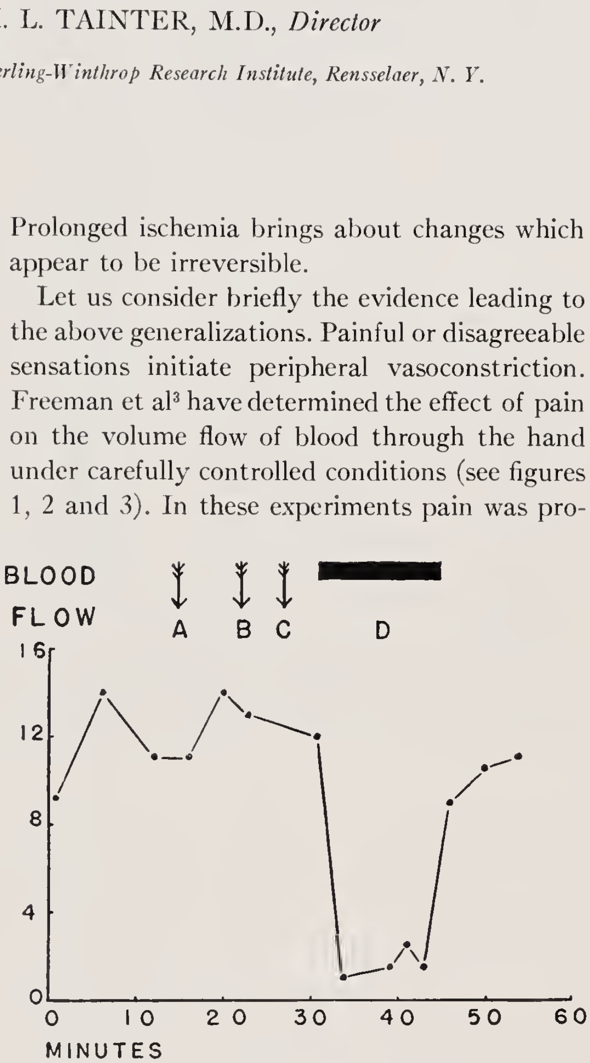


FIG. 1. Effect of pain, produced by inflation of a balloon in the ileum on volume flow of blood through hand maintained at constant temperature of 31.6° C. (from Freeman, Shaw and Snyder[3]).

A, B and C: Insertion and manipulation of balloon.

D: Inflation of balloon.

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* Delivered at the Twenty-second Annual Scientific Assembly of the Medical Society of the District of Columbia, October 2, 1951.

However, in shock this response is more marked. Thus, in a 54-year-old housewife suffering from intestinal obstruction due to carcinoma of the sigmoid, under conditions in which the flow should have been between 4 and 18 c.c., Freeman found a maximum flow through the hand of only 0.8 c.c. per 100 c.c. hand volume per minute, and a negligible hyperemia was obtained after applying the tourniquet test. Although blood was transfused, the patient died 5 hours later. Page and Abell[4] have made direct observations of the vascular bed of a section of exteriorized gut and its mesentery placed in a special observation chamber. They also observed extensive vasoconstriction after burns, hemorrhage, or the application of a tourniquet.

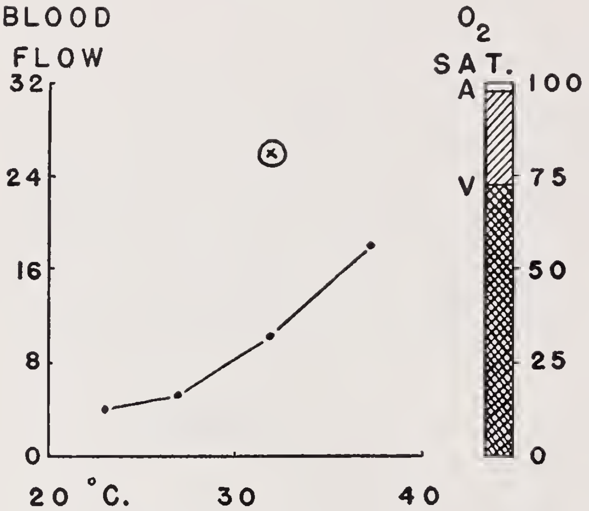

FIG. 2. Normal control; effect of increasing temperature of hand on volume flow of blood in hand and oxygen saturation of arterial and venous blood (from Freeman, Shaw and Snyder[3]).

Simultaneous with the increase in peripheral resistance induced by trauma there is a reduction in circulating blood volume (Blalock and Bradburn[5]; Blalock and Levy[6]; Erlanger, Gessell, Gasser and Elliot[7]; Ebert, Hagen and Borden[8]). In a recent experimental study of the mechanism of shock in peritonitis, Ebert, Hagen and Borden[8] observed a decrease in arterial pressure, concentration of the blood, low plasma volume, and a fall in cardiac output in dogs. These changes resemble those following hemorrhage. Similar results have been obtained by Remington et al[9–11] in a comparison of the effects of visceral trauma, leg muscle trauma and hemorrhage. They report a greater increase in peripheral resistance following trauma than after hemorrhage, this elevated resistance persisting until the terminal decline in pressure begins. Prolonged vasoconstriction brings about marked changes in some organs, particularly the intestine and liver, these changes apparently resulting from an inadequate oxygen supply (Freeman, Shaffer, Schecter and Holling[12]; Fine, Seligman and Frank[13]). Such changes can be delayed or prevented in experimental animals by perfusion of the splanchnic area or by the administration of agents which block the sympathetic nerves (Remington, Wheeler, Boyd and Caddell[14]; Wiggers, Ingraham, Roemhild and Goldberg[15]; Fine, Seligman and Frank[13]).

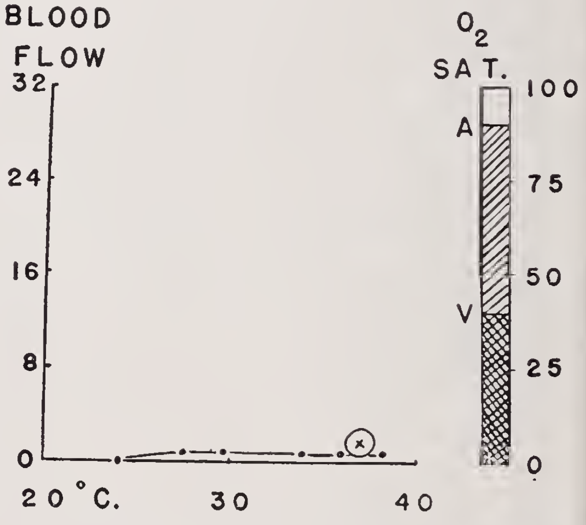

FIG. 3. Surgical shock from peritonitis; effect of increasing temperature of hand on volume flow of blood in hand, and oxygen saturation of arterial and venous blood (from Freeman, Shaw and Snyder[3]).

The previously outlined sequence of events seems to be well established for classical shock. But we may ask, how often is this exact situation met with in clinical practice? Usually the patient in shock is treated under conditions in which isotonic fluids, plasma or whole blood may be administered to replace, at least in part, any actual reduction in circulating volume. This may be illustrated by a case from the Institute files. A man 20 years of age underwent a laparotomy because of ileocecal ulceration with fistula formation. An ileotransverse colostomy with resection of the ileum was done. The patient went into shock postoperatively, with the skin cold and clammy, the pulse 120 and the blood pressure 82/60. He had received 1,000 c.c. of blood and 1,300 c.c. of glucose and water during the operation. An additional 500 c.c. of blood failed to bring the patient out of shock. At this juncture 1-norepinephrine (Levophed) was administered (8 mg. in 1,000 c.c.) with a prompt rise of the blood pressure. When Levophed was discontinued for a period of 10 minutes and 500 c.c. of blood started, the blood pressure fell again to shock levels. Levophed was able to maintain the blood pressure at proper levels with disappearance of all signs of shock. About 8 hours later the blood pressure dropped to shock levels (74/38) in spite of the administration of 500 c.c. of blood. Levophed was started again and maintained the patient in a normal peripheral vascular state.

Similar results have been reported for a series of 21 patients varying in age from 20 to 73 years and representing a cross-section of surgical practice. It is obvious that in these patients there are some important differences from those reported for classical shock. Inasmuch as a reduction in circulating blood volume is apparently not an important factor here, may there not be some preliminary reduction in vascular tone which may precede the "irreversible" changes previously referred to in fatal shock? Lee and Zweifach[16] have described an initial hyperreactive phase with an intermediate or transition period in hemorrhagic shock. In this transition period vascular reactivity becomes less pronounced and the additional support provided by a general vasoconstrictor drug such as Levophed or Neo-Synephrine may be most important. The effectiveness of a general vasoconstrictor agent may be illustrated by results obtained by Lord and Hinton[17] and Phillips and Nicholson,[18] who have used both Levophed and Neo-Synephrine with comparable results. It should be noted that infusion of the vasoconstrictor provides a more uniform and controllable rise in blood pressure than that from intramuscular injection (see figures 4 and 5).

We have previously described the vasoconstriction and cardiac acceleration which indicate an elevated activity of the sympathetic nervous system. This has been shown to involve the secretion of epinephrine (Rapport[19]). Driessens[20] studied the effect of trauma in the curarized dog and observed an epinephrine-like hypertension associated with hyperglycemia and a reduction in splenic volume. This could be prevented by ligation of the adrenal vein and diminished by anesthetization of the splanchnic nerve with cocaine. The secretion of epinephrine is considered an adaptive response to reinforce sympathetic stimulation in emergency states.

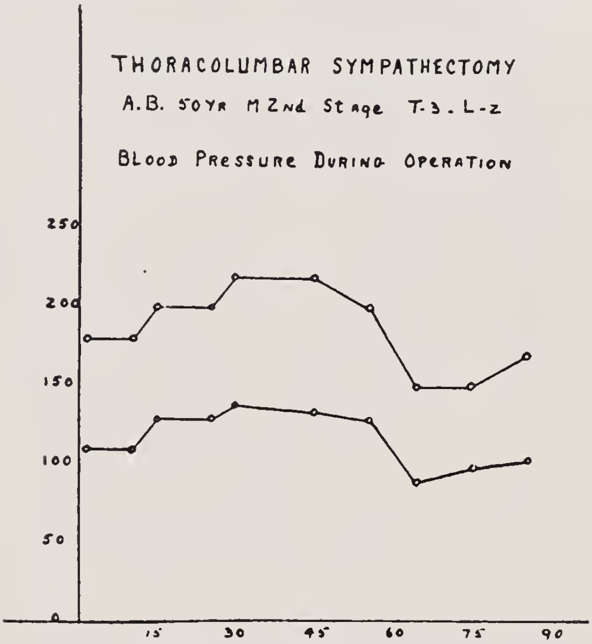

FIG. 4. Effect of Neo-Synephrine intravenous infusion on maintenance of blood pressure during a thoracolumbar sympathectomy (from Lord and Hinton[17]).

The pattern of actions of Levophed and Neo-Synephrine in man differs in several important characteristics from that of epinephrine, and these differences may offer an explanation for the favorable therapeutic effects previously reported. Epinephrine causes marked constriction of the cutaneous and splanchnic vascular beds simultaneously with vasodilatation of the blood vessels of the skeletal muscle. These changes, along with an increased pulse rate, are well suited to adjust the organism to emergency states involving flight or combat (the emergency pattern of Cannon[21]). Levophed and Neo-Synephrine, on the other hand, cause less intense vasoconstriction, but they cause constriction of the skeletal muscle vessels as well as those of the skin and splanchnic areas, thus producing an increase in total peripheral resistance equal to or greater than that obtained with a comparable amount of epinephrine. The heart is slowed, in contrast to the acceleration which characterizes the action of epinephrine. Inasmuch as the relatively large intramuscular vascular space is reduced, more blood is shunted into the other portions of the vascular system where a reduced flow may cause irreversible changes.

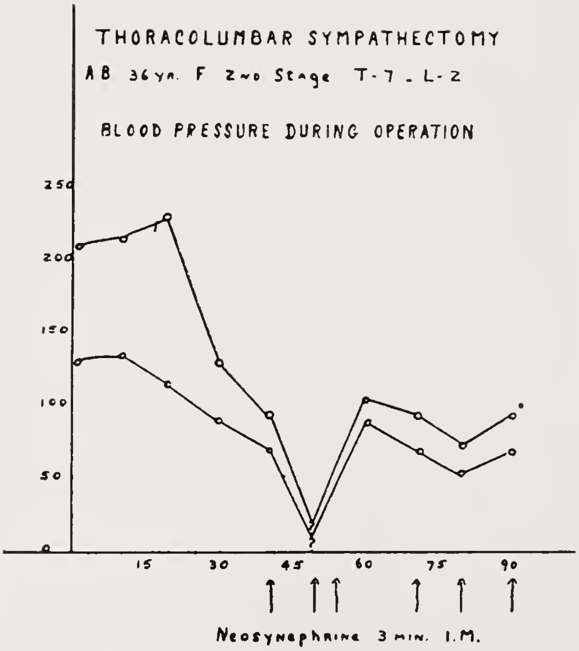

FIG. 5. Effect of intramuscular injections of Neo-Synephrine on maintenance of blood pressure during thoracolumbar sympathectomy (from Lord and Hinton[17]).

We have previously cited results which have shown that agents preventing or reducing splanchnic vasoconstriction greatly reduce shock mortality. The experimental work of Cohn and Parsons[22] and Frank, Seligman and Fine[23] has shown that similar results are obtained by procedures which maintain an adequate flow through the liver of animals exposed to trauma or hemorrhage. Levophed and Neo-Synephrine may provide well such an increased flow at the expense of the vascular bed of the muscle. This may be somewhat analogous to the results obtained by Glasser and Page,[24] who demonstrated the efficacy of intra-arterial infusions, which may provide an increase in flow through the constricted splanchnic blood vessels by elevating aortic blood pressure.

Neurogenic or primary shock results from a sudden interruption of sympathetic nervous impulses to the peripheral vascular bed so that there is a rapid reduction in vasomotor tone with a resultant precipitous fall in mean arterial pressure. There is no important change in circulating blood volume. This form of shock most often results from factors which influence the nervous system directly, such as intracranial injury, deep anesthesia, high spinal anesthesia, sympathectomy, or emotional crises. One may include also the action of peripheral vasodilating agents such as the nitrites, epinephrine overdosage, or ganglionic blocking agents which may induce peripheral vascular collapse. In all of these we are dealing primarily with a loss of vasomotor tone which may be readily corrected by the administration of vasoconstrictor drugs.

This may be illustrated by the following case histories. A 20-year-old soldier suffered a severe head injury after falling off a truck. He became unconscious a short time after the accident, grew progressively worse, and before arriving at the hospital spontaneous respiration had ceased and artificial respiration was administered by means of an endotracheal tube. The patient was moribund. He was operated upon immediately and a large subdural hematoma removed. However, after operation the blood pressure remained imperceptible. Apparently there was severe hypotension caused by central depression. Intravenous Levophed succeeded in raising the blood pressure to normal. The patient was kept alive in a respirator for 2½ days with constant intravenous Levophed or Neo-Synephrine administered by infusion. Although the patient eventually died, this case demonstrates the effectiveness of Levophed and Neo-Synephrine in maintaining blood pressure which had gone to subnormal levels from interference with the vital centers of the medulla.

In another instance, during the course of high spinal anesthesia the patient went into shock and his blood pressure fell from 140/80 to 50/±. Levophed infusion was started, and within 5 minutes the blood pressure had increased to 140/70. The anesthetic, which is considered to be responsible for this case of shock, reached the 6th cervical vertebra. Postoperatively the patient again went into shock and lost consciousness, but consciousness was restored and the blood pressure was elevated with the use of intravenous Levophed and 100 per cent oxygen by bag and mask within about 5 minutes.

Sympathomimetic amines have been administered intramuscularly to maintain blood pressure after spinal anesthesia. Lorhan and Lalich[25] have described results obtained with Neo-Synephrine in 150 cases of spinal anesthesia with either pontocaine or novocain. The patients' ages varied from 17 to 79 years, and the pressures before Neo-Synephrine varied from 60 to 190 mm. Hg systolic and 40 to 130 mm. Hg diastolic. The intramuscular administration of 2.5–5.0 mg. of Neo-Synephrine caused an elevation of pressure within the first 5 minutes with the maximum rise at 15 minutes. When the maximum pressure had been attained it persisted at this level for 30 to 45 minutes. The authors report further that the repetition of the dose was found to be effective in all cases.

Ephedrine is an effective vasoconstrictor for use with anesthesia (Weinstein and Barron[26]). However, repeated doses lose their effectiveness, and the drug may stimulate respiration and also cause various side-effects resulting from central nervous system stimulation. These may be desirable in shock states when central depression is prominent. Lorhan and Mosser[27] have obtained adequate control of blood pressure with propadrine in a series of 263 patients anesthetized with either pontocaine or novocain. The optimal dose of 50 mg. given intramuscularly produced a sustained elevation of blood pressure without apparent harmful side-effects. Vasoxyl has been reported to be effective in maintaining blood pressure during spinal anesthesia. King and Dripps,[28] using doses of 10 to 15 mg. given intramuscularly just prior to anesthesia, observed no important reductions in pressure in the majority of a series of 500 patients. The patients in the control series who received no pressor drug showed an average fall of 36 per cent. Similar results have been obtained by Altschule and Gilman[29] with intramuscular injections of 10 to 20 mg. of paredrine. These doses will cause pressure elevations lasting from ½ to more than 2 hours. Thus, the elevation of blood pressure in neurogenic hypotension is easily obtained, and there is a wide choice of sympathomimetic agents of established efficacy.

Vasoconstrictor drugs are important for the maintenance of blood pressure in sympathectomy operations. Wilson and Bassett[30] have described the use of Levophed in 112 patients undergoing splanchnicectomy and lower dorsal sympathectomy. Operations were begun 5 to 10 minutes after starting the infusion of Levophed in 5 per cent glucose, the rate of infusion being determined by the blood pressure level. Satisfactory pressures were maintained during operation without transfusions or supplementary vasopressor agents. Similar results have been obtained by Deterling and Apgar[31] during 36 stages of thoracolumbar sympathectomy performed in an unselected group of 21 patients (see figures 6 and 7).

Numerous recent reports have described paroxysmal hypertension resulting from excess secretory activity of adrenal medullary tumors or pheochromocytomata (reviewed, Goldenberg[32]). Surgical removal frequently causes a sudden and profound hypotension. Pantridge and Burrows[33] have described the successful removal of a pheochromocytoma in a 66-year-old woman. During the 19 minutes after clamping the tumor pedicle 40 c.c. of a solution containing 10 μg. of Levophed/c.c. was given intravenously with resultant restoration of blood pressure to safe levels. Subsequently the pressure was maintained by a Levophed drip which was continued for 30 hours. Palmer (reported by Goetz[34]) has observed similar results following the removal of a pheochromocytoma. The pressure dropped to 70/40 but was promptly restored to normal levels by a Levophed drip, this being used to support blood pressure over a 15-hour postoperative period. In these cases, the slow infusion of a vasoconstrictor drug, adjusted to the patient's need, has served as a "pharmacologic crutch" until homeostatic mechanisms were again functioning adequately.

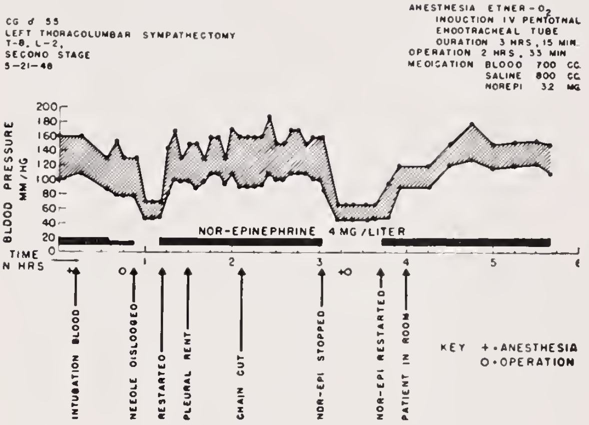

Fig. 6. Effects of continuous infusion of Levophed on systemic blood pressure during a sympathectomy (from Deterling and Apgar[31]).

Summary

In neurogenic or primary shock there is a sudden reduction of vasomotor tone which is readily restored by sympathomimetic vasoconstrictor drugs. There is a wide choice of agents suitable for this purpose. However, hematogenic or secondary shock involves a complex series of vascular changes wherein sympathomimetic drugs such as epinephrine have been considered to be contraindicated. In such cases recent clinical investigations have demonstrated that infusions of Levophed (1-norepinephrine) or Neo-Synephrine can restore the blood pressure and possibly the blood flow to normal and maintain it usually as long as the infusion is continued or until recovery occurs. The very informative case reported recently by Luger, Kleiman and Fremont[35] illustrates that Levophed can maintain the blood pressure for days if necessary until the otherwise fatal vascular atony has had time to be alleviated. It is suggested that this beneficial action results from a redistribution of blood whereby an increase in the volume flow through the splanchnic bed is obtained, thus diminishing the danger of irreversible shock. This new-found ability of Levophed to maintain the blood pressure in spite of the profound shock process robs the shock state of much of its danger and is certain to result in extensive saving of life.

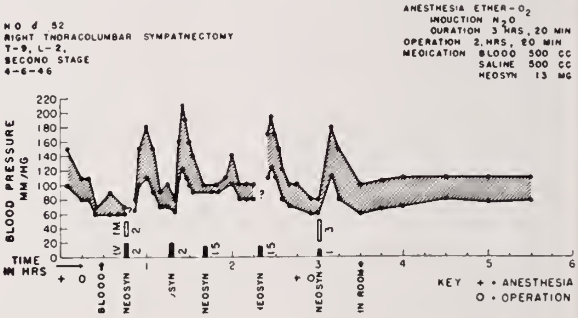

Fig. 7. Effects of single doses of Neo-Synephrine on systemic blood pressure following sympathectomy (from Deterling and Apgar[31]).

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(*Continued on page 122*)

THERMAL INJURIES IN ATOMIC WARFARE*

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AN ATOMIC bomb explosion of the Hiroshima type is accompanied by the release of enormous quantities of kinetic energy, mostly in the form of ordinary heat commonly recognized as infrared, visible and ultraviolet radiation. The remaining portion of this energy is released as blast and nuclear radiation. Immediately below the bomb burst and out to the distance of about 2 or 3 miles structural damage to buildings is very great. Wooden structures are flattened, but reinforced concrete seems to withstand the blast effect quite well. One of the important secondary effects of blast is the disruption of water and gas lines and the starting of many secondary fires.

The nuclear radiation is confined to a radius of about 1 mile, being most intense immediately beneath the bomb burst. Radiation hazard in this zone is very real and is due to gamma and neutron radiation. The penetrating power of neutron radiation is so great that only very thick concrete or earthen structures protect life. I belong to the school that considers the conventional or more newly designed thick concrete bomb shelters as devices ill designed to protect many of a city's population and too expensive for the protection they do afford.

In this discussion I will dwell little on damage from neutron or gamma radiation because I personally have had no experience with it. There is no very effective remedy against large scale irradiation, the only treatment being supportive, generally of the same type that is used in the management of wounds and burns.

The third type of injury, burns, is important because thermal injury constitutes an important cause of death in atomic attack. Thermal injury is extreme immediately beneath the bomb burst. The attentuation of the thermal flux with distance is much less than with nuclear radiation; moderate to severe thermal injury can occur out to approximately 3 miles. In the inner zone, from the hypocenter to about 1 mile, the heat is exceedingly intense and no living thing can survive its destructive effect. On out from the periphery of the 1-mile zone, up to about 3 miles, the burn destruction would become less serious.

Types of Thermal Injury

Thermal injury to atomic bomb explosions is of 2 types, the "flash burn" and the secondary, deeper burn. The flash burn is almost unique to atomic bomb explosions but is seen not too infrequently in civilian practice because of explosions of gases in a closed space. The flash burn affects only the exposed surfaces of the body, namely, the hands, arms and face, and differs from the ordinary burn mainly in that the damage is inflicted in an exceedingly short rather than a long period of time. At the 3-mile periphery these burns would be very superficial, resembling sunburn, but as one approaches the 1-mile zone the burns of the exposed portions would be deeper. These flash burns may be of either first or second degree and from the Hiroshima experience are quite painful.

It is my conviction that, although the "flash burn" is very important in atomic warfare, in populations housed in crowded cities such as in America the secondary burn would be encountered more often and would be more serious. Secondary burns usually occur as a result of clothing catching fire in the attempt of the victim to escape a burning building. As Harvey Allen[1] has so clearly pointed out, these secondary, deep burns are not confined to an arm or leg but usually affect several portions of the body and in many instances involve the whole circumference of one or more limbs and/or the trunk or thorax. In other words, they tend to be extensive. Because the heat damage is inflicted over a longer period of time these burns generally are deep.

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* Delivered at the Twenty-second Annual Scientific Assembly of the Medical Society of the District of Columbia, October 2, 1951.

It is well to remember that in atomic warfare the resulting injury may be very complex. Burns with serious associated injury should be expected. The associated injury is usually related to the blast effect of the bomb with multiple lacerations and glass wounds from flying debris and fractures, simple and compound. A burn injury is difficult enough to treat by itself; when it is associated with complicating injuries such as multiple wounds of the limbs, abdomen or thorax, or skeletal trauma, all the hazards of infection and shock are greatly multiplied. Planning for proper medical care in atomic attack involves thinking along military surgery lines. The simple surgery of peacetime trauma may not prove sufficient or effective.

As pointed out above, the extent and depth of thermal injury following an atomic bomb explosion depend on the position of the individual at the time of the explosion. In the 1-mile zone victims with thermal injury may have very serious burns. It is likely they will also have suffered extreme trauma as a result of blast and very serious radiation unless they happen to have been protected by many feet of concrete or dirt. In the 1- to 3-mile zone burns would be either of the flash type involving the exposed surface of the body or secondary as a result of burning buildings or clothing. The important details of burn care for these victims comprise:

1. An estimate of the extent of thermal injury.
2. An estimate of the severity of complicating injury.
3. Proper identification of the victim's position at the time of explosion.
4. Relief of pain.
5. The management of burn shock.
6. Fluid and electrolyte care.
7. Care of the burn wound.

Extent of Burns

The extent of thermal injury should be estimated as soon as possible, because it relates to effective management of shock and proper disposition and later care of the burn victim. If the burned area is above 20 per cent of the body surface the patient will probably go into moderate or severe shock unless antishock measures are employed. The more the delay, the more difficult it will be to treat shock with ultimate success.

One of the disheartening features of effective medical management after atomic attack may be the disposition of those so hopelessly burned or otherwise injured that no medical care can accomplish survival. There is no truly effective peacetime treatment for burns of about 50 to 60 per cent of the body surface, even by those in well conducted surgical clinics highly experienced in burn therapy. In atomic warfare with patients with burns of that extent the chief responsibility of the physician will be to relieve pain and suffering and then turn his attention to the effective care of the less seriously injured.

Complicating Factors in Severe Burns

Since respiratory tract burns constitute one of the most serious complicating features of thermal injury, the physician must learn at once whether the patient with a burn has a complicating respiratory tract burn. Rapid but careful examination of the nose and throat and noting whether the victim has hoarseness, speaks in a husky voice, or has rather severe coughing attacks will establish this. The complication of respiratory tract injury greatly increases the mortality of burns even in peacetime.

The physician or first-aid worker must ascertain by observation and examination the presence of a serious complicating injury in a burn victim. Although the burn may be fairly extensive (around 25 to 30 per cent), if the victim also has a fracture of one of the major portions of the lower limbs or pelvis, the ensuing shock from whole blood loss may be more important than the immediate care of the burn wound. Also, if there is a complicating penetrating injury of the abdomen or thorax in an extensive burn, the complicating injury has precedence in therapy. It may require early surgical operation to stop serious bleeding or to ward off inevitable infection in the case of a perforated viscus from an abdominal wound.

PROPER IDENTIFICATION

This is the problem for the first-aid worker and is of interest only for those living victims in the zone from the hypocenter out to about $1\frac{1}{2}$ miles. The first-aid worker should note on the identification tag the position of the victim; even though he is found at the periphery of the $1\frac{1}{2}$-mile zone he will still have received enough external body radiation to effect eventual outcome. Studies[2] under way in our laboratory indicate the importance of the complicating feature of even small amounts of external radiation when combined with thermal injury.

RELIEF OF PAIN

Pain may be an important factor in those patients with superficial burns, but it is well for the physician or first-aid worker to realize that this pain is best relieved by proper cover of the wound and not by large doses of opiates. Pain from burn wounds is readily relieved by cover of the burn wound with a simple dressing to exclude air. If shock is present opiates should be given in small amounts only (morphine, 0.015 Gm. or $\frac{1}{4}$ grain, or codeine, 0.065 Gm. or 1 grain). The important observations of Beecher[3] on the pain-relieving properties of certain of the barbiturates should be remembered. Much of what passes for pain is, in reality, the manifestation of hysteria, and hysteria is not well treated by opiates. The shorter-acting barbiturates are much more effective and safer.

TREATMENT OF BURN SHOCK

If the extent of the burn is less than 20 per cent of the body surface and the oral salt and bicarbonate solutions advocated by Moyer[4] can be taken in adequate amounts, shock should be no problem. These solutions should be given and retained in amounts large enough to maintain a steady output of urine. If the extent of the burn is 20 to 35 per cent of the body surface, 1 to 2 liters of plasma or plasma substitutes must be given intravenously in the first 24 hours with about one half of this amount the second day. Burns greater than 35 per cent require whole blood in equal quantities with plasma or plasma substitutes in order that shock may be prevented. As stated above, burns involving more than 50 per cent of the body require so much blood and so much skilled medical and nursing attention that it is quite impossible to envisage this abundance of care after atomic attack.

FLUID AND ELECTROLYTE THERAPY

The most critical period for proper fluid and electrolyte replacement in the burn patient is the first 48 hours. Oral salt and water therapy is sufficient, if taken in adequate amounts, in those burns of less than 20 per cent. For more extensive burns I believe it will be imperative to arrange for intravenous therapy of salt and water. Generally the burn victim requires about the same amount of salt solution as plasma and/or whole blood during the first 2 days. Additional water is given to insure a urine output of from 25 to 50 c.c. per hour in adults. This means that an adult burn victim should excrete approximately 1 liter of urine the first day. After atomic attack the adequacy of shock and of fluid and salt therapy might be simply measured by the burn victim passing enough urine in the first 24 hours to fill a quart bottle.

It is highly important with burn victims with respiratory tract damage to give fluid therapy only in amounts sufficient to insure a satisfactory urine output, inasmuch as they are very susceptible to early or late pulmonary edema. I emphasize that whole blood must be given for shock in those victims who have serious associated injuries. Care must be taken that not too large amounts of plasma or plasma substitutes are administered in the early phase of treatment.

TREATMENT OF BURNS

Burn wound care falls into 2 simple categories, (1) the closed, and (2) the open-exposure treatment. These 2 methods are not mutually exclusive, and in the same victim the intelligent physician may find himself using both methods on different parts of the body.

With the closed method every attempt is made to cover the burn wound with a satisfactory dressing that prevents seeding of the burn wound by microörganisms falling on the wound or brought to the wound by unclean hands or dirty instruments. The method now utilizes various types of sterile dressings, either with dry inner surfaces or a gauze coated with petrolatum or other suitable ointments. Recently Harvey Allen[1] and our group have developed a simple one-piece dry dressing which can be quickly and easily applied by relatively untrained persons to even an extensive burn wound. This dressing, procurable in 2 sizes, 22 x 18 and 22 x 36 inches, has recently been approved by the Subcommittee on Burns of the National Research Council for use by the Civil Defense and military authorities, and stockpiling of it for atomic disaster use is now under way. This dressing greatly simplifies the closed method of burn wounds, and there is every reason to believe that in atomic warfare it will be very useful. This dressing will likely be highly useful for the emergency covering of other types of serious wounds resulting from the bomb. There is more or less general agreement that the closed method of burn care is best for circumferential burns, such as around a leg or trunk and for burn victims requiring transfer to a hospital for more definitive care.

The term "open or exposure" treatment of burns implies exactly that—leaving the burn wound uncovered and allowing it to dry under the proper conditions. This method is under serious study in several active burn clinics in this country and abroad. Some surgeons believe that in the chaos that may follow atomic attack, this method would have to be used. The open method seems to work very well with superficial burns. It has been given a less severe test with the deep, full thickness burn, but under certain precautions where rapid drying results the open air method seems to work quite well with them. It is much less effective than the closed method in extensive circumferential burns involving the limbs and trunk, because with the open method rapid drying of the burn wound is less easily accomplished.

Both methods require moderately expert surgical and nursing care, and neither method is successful if neglect is allowed. The successful use of either method requires more or less constant attention of the physician and nurses so that burn patients receive enough fluids and salt to ensure an adequate urine output, proper food in amounts great enough to ward off malnutrition, adequate antibiotic therapy to ward off infection, and surgical therapy at the proper time to cover those portions of the body in which the burn has been so deep that full skin thickness loss occurs.

PREPARATION FOR ATOMIC ATTACK

The important groups of personnel necessary for this work will be (1) rescue workers, (2) first-aid workers, and (3) medical and nursing personnel. It is not in my province to discuss the hazards of radiation for those rescue workers who must go into the zone of greatest damage to bring out victims after bombing attack. I am in agreement with Brigadier General James Cooney in the belief that in a democracy these hazards, although considered by some to be great, must be considered insignificant when human lives are concerned. To be effective, the rescue workers must go into these areas to aid any surviving victims as soon as possible after the attack. Of course, they should be accompanied or preceded by radiation monitors, but we must develop a more realistic view of what truly constitutes radiation hazard in times of such emergency. After all, the rescue workers may not spend very much time in that zone. Also, we must never forget that should atomic attack ever be made on our cities or soldiers, we will be fighting for our very survival as a nation of free people.

Rescue squads similar to those trained in England during the past war will be needed in large numbers to bring out victims from demolished and burning buildings. I am happy to note these workers are under training at this time in several of our larger cities, including Washington.

The first-aid worker will be needed in very large numbers to help in the care of burn victims. It is surprising how much useful medical information can be taught to intelligent lay personnel. These and nurses must be available at first-aid stations and hospitals to handle the bulk of care for atomic attack victims.

Medical personnel may be so scarce in an affected city that it will be necessary to bring in from adjoining towns or nearby cities additional personnel. In all events, such personnel will be so scarce as to require severe rationing of their services. There is a serious deficiency in surgeons trained in the school of emergency surgery; only war and battle train such surgeons.

Not the least in importance are the large numbers required for proper fire fighting and transportation of the wounded.

A National Blood Program

I have recently been quoted as intimating there is no longer any need for whole blood or plasma now that we have effective plasma substitutes available. Permit me to make my position so clear that there can be no misunderstanding about my views.

I have for the past 10 years been studying the problem of the best treatment for traumatic and burn shock. If I have learned anything it is that most cases of shock from trauma are best treated by the use of whole blood. In extensive burns whole blood again is the treatment of choice. Plasma substitutes such as gelatin or dextran appear to be highly effective in burn shock of lesser degrees, but they cannot and never will take the place of whole blood

I wrote as late as April 28, 1951 in the *Journal of the American Medical Association*, "Because one of the first and most urgent needs of the trauma patient is for whole blood or plasma, Americans must organize at once a system on a national scale that will make readily available large supplies of whole blood and plasma."[5] I had stated earlier in the same journal, "No informed person who has clearly and justly considered the magnitude of the problem of adequate medical care that would follow an atomic attack on American cities can fail to recognize the necessity for a truly national blood program."[6]

Those statements, made in absolute sincerity, should make my position clear. My present stand is exactly as stated, but I would add this: If as a nation of informed and brave free men we do not at once make effective a national blood program in association with the American Red Cross and hospital and private blood banks, we face disaster if atomic attacks should come.

It is obvious that the national blood program at this time is not truly effective. How do we know that such is the case? Every day in every leading newspaper there is to be noted a plea from lay persons and the Church for more blood donors in order that vitally necessary supplies of whole blood and plasma can be delivered to our wounded in Korea. The response has been so poor that recently the military authorities have been forced to add their appeal in newspapers and over radio and television for this blood. The cry is made daily for "Blood, Blood, Blood," and still there is not sufficient blood.

Wherein lies the fault? Understandably there have been mistakes on the part of all of us who have been engaged in the national blood program. A discussion of these errors is of little avail. The fundamental and glaring fault rests with each citizen. You and I simply have not given our blood. How in the name of all conscience and human decency can we fail to respond to this urgent call? The answer is simple. It is a failure of the American people.

There is not time for me to discuss the extremely important problem of adequate medical supplies for the care of atomic burn victims. You are all aware that only recently the Congress has turned down the requests of the Civil Defense authorities for the amounts of money needed to acquire these supplies. Again I would remind you that we should be slow to place all the blame for this action on Congress. How can we expect Congress to be truly aware of these needs when we note the apathy of the citizens in their response to the call for blood? I am convinced that if in the next months the citizenry showed their faith in the requests of the Civil Defense authorities for these supplies by responding to the call for blood, this would help greatly to alert Congress to the needs of the hour.

In closing, let me state once more that we invite disaster and defeat, not by Russia's strength but by our own negligence. Across the strife-torn centuries I can hear the voice of Demosthenes crying to his beloved Athenia, "Every man, where he can and ought should give his service to the state without excuse; in a word, plainly, if each of you will become your own master and cease to do nothing, while your neighbor does everything for you, you shall then with heaven's permission recover your own, and get back what has been frittered away. For your enemy has been exalted not so much by his own strength as by your negligence."

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CLINICAL EVALUATION OF VERGITRYL, A NEW, HIGHLY PURIFIED EXTRACT OF VERATRUM VIRIDE*†

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THE AVAILABILITY of a highly purified, well standardized preparation of Veratrum viride (Vergitryl‡)[1] in both parenteral and oral forms suggested an evaluation of this agent not only in essential hypertension but also in the toxemias of pregnancy. Vergitryl by the oral route of administration has been used in the treatment of essential hypertension. In patients treated continuously for periods of 6 months to more than 1 year the drug appears to be at least as effective and no more toxic than other available Veratrum preparations. The details of this study will be reported elsewhere.

The purpose of the present communication is to report on the use of Vergitryl in the management of toxemias of pregnancy. Various reports have appeared concerning the beneficial effects of Veratrum viride in the hypertensive toxemias of pregnancy.[2, 3] However, the use of crude extracts did not permit standardization of dosages, and undesirable side-effects were frequent. The purpose of this report is to call attention to the apparently greater predictability of response and the diminished incidence of major side-effects when the purified preparation is used.

METHODS AND RESULTS

Preliminary observations indicated that the majority (95 per cent) of toxemic patients exhibit a definite fall in blood pressure with minimal or no side-effects following an intramuscular dose of 0.75 unit of Vergitryl. This circumvents the technically difficult and time-consuming procedure of titrating each patient separately as is necessary in the technic of continuous intravenous administration of the crude extracts.[3] Therefore, all nonconvulsive patients were given this dosage initially. The drug was mixed with 1 c.c. of 1 per cent procaine in order to prevent local pain. Recent evidence with the use of other local anesthetics suggests that procaine also inhibits the development of nausea and vomiting. The blood pressure and pulse rate were recorded every half hour, and whenever the blood pressure rose above 140/90 mm. Hg the dosage was repeated, thus permitting the adoption of a routine dosage schedule. In the occasional case in which no decrease in arterial pressure occurred 1 hour after the initial dose of 0.75 unit (0.05 c.c.) of Vergitryl, it was increased to 0.9 unit (0.6 c.c.) and if necessary at the end of an additional hour to 1.05 units (0.7 c.c.) until an effective dosage was obtained. If nausea or vomiting occurred it was treated immediately with 50 mg. of pentobarbital sodium given intravenously.

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In 17 cases of moderate to severe preëclampsia the hypertension and symptoms of toxemia were quickly controlled following the use of Vergitryl in all cases. In cases of mild preëclampsia similar results were obtained. Of 15 patients who had a past history of essential hypertension and a superimposed toxemia, 13 exhibited reduction of blood pressure to 140/90 mm. Hg or less and clearing of signs and symptoms. Of 46 patients who exhibited elevation of blood pressure in the early postpartum period (so-called postpartum preëclampsia) 44 responded promptly to the use of Vergitryl with reductions of arterial pressure to the normal range.

It was apparent, therefore, that Vergitryl, usually given in a standard dose of 0.75 unit intramuscularly, produced a prompt fall in arterial pressure to the normal range with accompanying clinical improvement as manifested by subsidence of edema, albuminuria and retinal angiospasm in the majority of cases of nonconvulsive toxemias. Repeated doses of the drug could be given as often as once per hour when necessary to maintain the hypotensive effect, although the usual interval between doses was 3 to 4 hours. Severe toxic reactions were not seen, and nausea and vomiting occurred in only 11 per cent of the cases. There were no cases of maternal or fetal mortality in the series.

In the convulsive or eclamptic toxemias the intravenous route of administration was utilized in order to obtain an immediate effect. The details of the method of administration will be published elsewhere. In 8 patients so treated the convulsions were promptly controlled, and the blood pressure was reduced in all cases. A living fetus was obtained in 7 cases. Moderate nausea and vomiting occurred in every case treated by the intravenous method but could be controlled by giving pentobarbital sodium intravenously. There was no maternal mortality.

SUMMARY

The availability of a highly purified, well standardized extract of Veratrum viride (Vergitryl) has simplified the management of the hypertensive toxemias of pregnancy. In comparison with the crude extracts its advantages are (1) predictable responses to standard dosages rather than individual titration of each patient, and (2) administration by the intramuscular rather than by the continuous intravenous route in all except the convulsive cases.

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FACTORS IN THE SELECTION OF CASES FOR SURGERY ON THE HEART VALVES*

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IN ABOUT 10 per cent of cases of rheumatic heart disease endocarditis results in the development of "pure" mitral stenosis. In an undetermined but significant proportion of such instances the person leads a normal or only slightly restricted life for its usual span. Operation, therefore, is not indicated in patients who display no more than the typical physical signs of mitral stenosis. In the majority, however, and most commonly among women, pulmonary engorgement becomes progressive and disabling, usually during the fourth or fifth decade of life.

Within the past 5 years interest has revived in the surgical treatment of mitral stenosis. Methods have been widely and successfully applied to enlarge the mitral orifice either by cutting or tearing along the fused valve commissures. Operative mortality has been 12 per cent or less. Relief has sometimes been dramatic; great improvement has been accomplished in well over half the patients, and disability has been reduced in many others. Although the morphologic features of the damaged valve cusps and chordae tendineae affect the local success of the surgical procedure, the circulatory results depend largely upon the selection of cases for operation.

Indications

The indications for surgical treatment of mitral stenosis derive directly from its dynamic consequences. Increased pressure in the left auricle, referred back through the valveless pulmonary veins, is reflected in altered conditions of pressure and flow in vital areas of the pulmonary circulation. The reserve capacity of the pulmonary vessels is normally considerable; blood flow may be increased several fold without significant signs of engorgement or elevation of pulmonary arterial pressure. With mitral stenosis the available vascular channels in the lungs are already more completely filled at rest, and pressure within these vessels, notably in the pulmonary capillaries, rises with effort or excitement. When hydraulic pressure in these capillary vessels exceeds a critical level, pulmonary edema results as fluid escapes into pericapillary spaces in the alveolar walls. When this condition becomes frequent or persistent respiratory function is locally impaired. When it is widespread the elasticity of the turgid lung is reduced and the reflex stimulus to hyperventilation with exercise is exaggerated. With long-standing engorgement of the lungs pulmonary vascular resistance is increased.

Symptoms of pulmonary engorgement—dyspnea. Most helpful for the evaluation of the patients' circulatory status is their description of their limits of comfortable activity. Occasionally these change only gradually. More commonly after many years without restricting discomfort, during which women patients may have gone through several pregnancies without significant circulatory embarrassment, distressing breathlessness, often accompanied by cough, becomes progressively more severe. Eventually paroxysms of dyspnea interrupt sleep at night and additional pillows are necessary for comfort.

Pulmonary edema. What has been said of dyspnea as a manifestation of circulatory disability applies as well to transient attacks of pulmonary edema. Characteristically these occur following effort or excitement and are accompanied by signs of moisture in the air passages or the raising of foamy, pink sputum. In patients with mitral stenosis this is not evidence of left ventricular failure but of engorgement in the functional area of the pulmonary capillaries provoked by the relatively too efficient right ventricle. Indeed, when the right ventricle fails after persistent increase in pulmonary vascular resistance or sometimes with the onset of auricular fibrillation, pulmonary edema may not recur.

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Hemoptysis. Pulmonary infarction, with sputum containing dark blood or clots, may occur following embolism from the right auricle in the presence of auricular fibrillation, or due to local thrombosis of vessels in the congested lung. Usually these are late manifestations of disease and when accompanied by other embolic phenomena or by right heart failure are cause for caution in recommending operation. Frank hemoptysis, on the other hand, producing relatively large amounts of bright red blood, is a most urgent indication. Such attacks may occasionally follow effort but are not commonly accompanied by other signs of pulmonary congestion. The sources of bleeding are evidently one or more varices of the bronchial veins which afford collateral channels between the pulmonary and systemic venous systems. Such hemoptyses are signs of critical rise of pulmonary venous pressure relative to that in the systemic (azygos) veins, and of fragile collateral vessels. Attacks tend to become more frequent and bleeding more profuse.

Results of cardiac catheterization. Physiologic data gathered by cardiac catheterization are helpful but not essential aids in predicting the likelihood of circulatory relief. Cardiac output so determined is usually diminished at rest and fails to increase with mild exercise as in normal persons. Pulmonary arterial pressure is measurably elevated, occasionally above the level of that in the systemic arteries, and rises sharply with exercise. Pulmonary "capillary" pressure (recorded with the tip of the catheter in a terminal branch of the pulmonary artery) is usually high. The pattern of pressure most favorable to pronounced postoperative benefit consists of raised "capillary" pressure without excessive elevation of pulmonary artery pressure, suggesting that pulmonary artery vascular resistance has not become high, and, by implication, irreversibly fixed. Arterial oxygen saturation is usually normal at rest but often falls with exercise as pulmonary blood flow fails to increase to meet the new demands. Diminished resting arterial oxygen saturation suggests that changes in the alveolar walls secondary to chronic capillary congestion interfere with diffusion; it cannot be assumed that this function will be restored even though operation relieves the mitral obstruction.

In evaluating the significance of symptoms and signs as indications for surgical treatment of mitral stenosis it is most important to identify other contributing factors and, from the patient's story and by direct observation, to appraise the rate of progress of disability as well as its degree. Occasionally this may be a slow process occupying many years. More commonly a patient may pass from a state without significant discomfort to severe disability within a year or two or even less. Sometimes this may be accounted for by the establishment of auricular fibrillation. Sometimes persistently increased erythrocyte sedimentation rate, leukocytosis, or mild fever suggest continuing activity of rheumatic disease. And, in the advanced stages of disability signs of right heart failure (congestion of systemic veins, hepatic enlargement or peripheral edema) indicate that, due to long-standing engorgement, pulmonary vascular resistance has become fixed at a high level.

CONTRAINDICATIONS

Active rheumatic disease. Although fever, leukocytosis, or elevated sedimentation rate may be due to other causes in these patients, unless the alternative cause can be clearly identified caution dictates that the rheumatic state and presumably carditis be assumed to persist. Some of the tragedies attending the operative treatment of mitral stenosis have evidently been due to exacerbation of rheumatic carditis.

Acute bacterial endocarditis. This is an obvious contraindication. Operation upon patients in whom the disease has been cured by antibiotic therapy involves some potential risk that viable bacteria enclosed within the healed, scarred valve may reawaken the local infection. Adequate experience is lacking but a few such patients have undergone mitral surgery and, so far, bacterial endocarditis has not been a prominent postoperative complication.

Intractable right heart failure. When the right heart becomes overburdened and dilates in the face of long-maintained high pulmonary vascular resistance, and signs of congestive failure with hepatic engorgement appear and persist despite rest and the administration of digitalis and diuretics, circulatory disability has probably reached an irreversible stage. In response to the patient's urgent plea, and lacking effective alternative treatment, some operations have been undertaken under these circumstances, but the mortality is discouragingly, if not prohibitively, high.

Embolism. Auricular fibrillation is not a contraindication in itself, but when long established it contributes to the hazard of embolism. There is no certain means to identify mural thrombi prior to operation, but history of recent or frequent embolic phenomena sharply increases the risk of postoperative embolism. This has occurred in 3 to 5 per cent of the cases.

Mitral insufficiency. Given the typical physical signs of mitral regurgitation its influence upon the circulatory dynamics in any case is difficult to appraise. Enlargement of the left ventricle is more commonly evident with the combined defects than with mitral stenosis alone. Any considerable enlargement of the left auricle suggests accompanying mitral insufficiency, particularly if dilatation of the auricle with ventricular systole can be demonstrated by fluoroscopy or by roentgenkymography. Concern regarding mitral insufficiency in these cases is based upon the apprehension that surgical relief of the obstructive narrowing of the orifice may only enhance the adverse circulatory effects of regurgitation.

Lesions of other valves. Few patients with multiple valve lesions have undergone operation. On theoretical grounds an obstructive lesion at the aortic valve would seriously compromise the benefit of valvulotomy for mitral stenosis. Following relief of mitral obstruction in such cases a larger proportion of the ventricular contents would flow back through the inflow tract with systole than through the obstructed aortic orifice.

SUMMARY

The selection of cases of mitral stenosis in which favorable results may be expected from surgical treatment rests primarily upon appraisal of the dynamic consequences of mitral obstruction.

Indications are the symptoms and signs of disabling engorgement of the pulmonary circulation: (1) progressively severe dyspnea on exertion or excitement, (2) cough or pulmonary edema following effort or excitement, (3) paroxysmal dyspnea at rest (often at night), (4) orthopnea, and (5) hemoptysis.

By no means all individuals with the physical signs of mitral stenosis require surgical relief. However, experience indicates that the likelihood of striking benefit diminishes as the duration of the above symptoms lengthens. Operation should, therefore, be advised as soon as progressing disability becomes manifest.

Contraindications are (1) active rheumatic carditis, (2) bacterial endocarditis, (3) intractable right heart failure, (4) frequent or recent embolism, (5) mitral insufficiency, and (6) lesions of other valves, particularly aortic stenosis.

ELEMENTS OF PSYCHOTHERAPY IN GENERAL MEDICAL PRACTICE

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THE ELEMENTS of psychotherapy are as old as the practice of medicine and, in some form, have always been an important part of the professional skill of the good physician. The capacity to reduce the patient's anxiety, panic, or despair in his illness and to create a hopeful or even confident coöperation has always been a quality of the respected doctor of medicine; indeed it has always been one of the important reasons for the respect itself and has been no small part of the secret of his success in the healing art. Some skill in psychotherapy is entirely inseparable from the skillful practice of medicine. In recent years psychotherapy has been further developed and emphasized as a special skill and special field. The technical vocabulary of the specialist, and sometimes his attitude as well, may have the unfortunate effect of making the nonspecialist feel like an unskilled intruder. This is particularly unfortunate when the field is as broad and inclusive as that of psychologic factors in illness and in recovery, elements which are common to the whole of medicine.

Systematic consideration of psychotherapy makes it possible to formulate some of the psychologic factors implicit in medical treatment, and to suggest certain principles and practices for the mental hygiene of medical treatment. Some of these may be stated as follows:

The sick person is usually fearful or anxious, and the relief of anxiety is usually a primary objective of psychotherapy. Aside from the direct and understandable (although often exaggerated) fear of chronic illness or death, illness often creates, and even more frequently reawakens or intensifies, other fears or anxieties. For example, the man may fear the loss of his job, particularly if there was some preëxisting sense of inadequacy, or the woman the breakup of her home as a result of the incapacity occasioned by the illness. Such fears may effectively block treatment by rendering the patient unwilling to abide by medical direction concerning rest, for example. It is not for the physician to transfer to the patient the full responsibility for a resulting therapeutic failure. The Father of Medicine himself defined medical responsibility more broadly in his first aphorism:

> "Life is short, and the Art long; the occasion fleeting; experience fallacious, and judgment difficult. The physician must not only be prepared to do what is right himself, but also to make the patient, the attendants, and the externals coöperate."

Since the physician has only moral authority, he cannot force the coöperation of the patient, but must win it. Understanding the psychology of the patient is a part of the responsibility of the physician no less than understanding the disease which affects him.

The physician should not overlook the frequency with which patients tend to feel their illness to be a punishment for some deficiency of conduct or thought. This is particularly likely to be the case with insecure, worrisome personalities in conflict and anxiety over their own impulses. Even in illness which cannot be considered in any reasonable sense psychogenic or psychosomatic the psychologic state of the patient is always an important, and frequently a determining, factor in recovery.

The dispelling of unjustified fears, the reduction of morbid anxiety, and the encouragement in the patient of some justified confidence in his receiving help should be a primary objective of the physician.

Scarcely less important to the patient than the preservation of his life is the independence of his personality. An approach which shows respect for the patient's personality generally wins coöperation, and an approach which shows no respect for personality may lose coöperation even though the patient believes his life is jeopardized by that lack of coöperation.

Although it is not desirable that the physician regulate his treatment primarily according to the wishes of the patient, since to do so would be to abdicate his professional role, yet it is of the greatest importance that he understand what the patient's strong desires are and treat them with respect. The patient's desire to determine his own actions is especially important. Sympathetic explanation of the reason for necessary restrictions and their probable duration will go far toward reducing tension about them and winning coöperation. If the patient challenges the advice, the physician may sometimes advantageously explain that he is not seeking to make life decisions for the patient but merely seeking to do his job as a good physician, and refer back to the patient in a kindly manner the question of the wisdom of taking medical advice. The physician should seek to maintain his position as a professionally trained person offering help rather than permit himself to be cast in the role of a forbidding policeman.

In general, whenever a patient shows signs of feeling too pressed or hemmed in by the physician, the latter should consider whether the patient may not be most benefited by a release of this pressure by a kindly discussion embodying the attitude on the part of the physician: "This is your decision. It is up to you. Let us talk about what the results of different courses of action are likely to be." Such an approach if honestly given and not with a tone of impatience is usually accepted by the patient and very frequently results in a change of attitude from resistance to external pressure to a personal assumption of responsibility in the matter at hand.

If the patient accepts the desirability of following medical advice but protests that in this instance it is impossible or too difficult for him to do so, this may well be the basis for further discussion of what problems or experiences make it difficult or impossible for him. Objections may be due to misunderstandings, misapprehensions or emotional ways of looking at the requirements which may soften or disappear under a little kindly discussion. Or the physician may find some way of achieving his therapeutic objective which by-passes particular elements to which the patient objects.

In dealing with the psychotic patient who needs hospitalization the physician must very frequently support the relatives in their reaching a decision to hospitalize the patient against his will. Relatives are often understandably reluctant to do so, and may need a good deal of firm, kindly support. They may need to talk about it and may require a little time to adjust themselves to the idea. Either lack of firmness in advice that this course is wise and necessary and to the best interest of the patient, or lack of an attitude of kindly understanding may result in their failure to follow the advice, in the first instance because the necessity has not been made absolutely clear, and in the latter because the feeling of betrayal of family loyalty aroused in many persons in relation to forcing the hospitalization of a member of the family is not adequately managed. The physician can escape moral responsibility for tragic results of a failure to follow his advice only if he has shown full professional diligence and skill in giving the advice in the way most likely to insure its acceptance.

Release of inner tension is another important element in psychotherapy. Encouraging the patient to talk about his problems is often a very valuable means for the release of tension. The patient who has bottled up his resentment toward, for example, a superior or a spouse, may after relieving himself by an expression of anger be in a much more flexible and coöperative frame of mind and may spontaneously shift his attention from what he has been objecting to, to what he can do to improve the situation, sometimes with an amused and tolerant assumption of some previously unrecognized responsibility.

The relief of excessive feelings of guilt or of inadequacy is a widely important element of psychotherapy, particularly in psychoneurotic patients. It is achieved particularly by the understanding and accepting attitude of the physician. As he gains confidence in the physician the patient is usually increasingly willing to tell those things which have caused him self-blame and guilt-anxiety. Usually in psychoneurotic patients these elements are lesser rather than greater, relatively usual human failures and shortcomings, thoroughly understandable, and not justifying the extent of the patient's emotional reaction. The physician should be careful not to intrude his personal value-judgments incautiously. For example, it is wise to treat the value-judgments arising from the religious beliefs of the patient with the greatest respect, although this implies no need to neglect those opportunities afforded by raising questions when the patient has misinterpreted teachings of his religion or is seeking to apply them in distorted ways. When such problems arise there is often value in referring the patient to a religious counselor of his faith.

The mere fact that the patient's actions and feelings can be understood and accepted by the physician may go far toward relieving a morbid sense of guilt or inadequacy. The reëxamination by the patient of his own values which commonly results usually leads to a better emotional perspective. The physician should be aware that deeply ingrained feelings are as a rule modified but slowly. He should avoid the unjustified pessimism of concluding that such attitudes are unmodifiable and the equally unjustified optimism of believing they can be removed by superficial reassurance and a pep talk.

The neurotic patient especially is typically torn by desires or impulses of which he is unconscious. This is by reason of the fact that such desires and impulses are in conflict with his conception of himself as he is or should be, and are repressed. While the deeper exploration of the unconscious is a task for the specialist, any physician should have some awareness of the contradictions and vagaries of human motivation, and some capacity to accommodate himself to them. For example, the overanxious, oversolicitous, overconcerned mother or spouse is frequently recognizable to any wise observer as a person pushing out of her mind strong feelings of resentment at the burdens of care of the patient and proving to herself and the world what a good mother or wife she is. Or the physician may recognize in the appreciative patient who carries out his instructions to the letter a dependence upon the physician which the patient does not wish to give up, and which may create an obstacle to his recovery.

The physician should use such realizations with discretion. No good and much harm is likely to result from charging the oversolicitous mother or wife with resentment of the burden of the patient, but some recognition of her need for appreciation of her sacrifice and for reassurance may be helpful. The dependent patient can be gently encouraged to a self-confidence in which he outgrows his need for dependence. Such transitions occur only slowly. The secondary gains of illness may be protecting the patient from return to a life situation to which he feels unequal, and change in that situation or in his own sense of adequacy may be necessary to recovery.

The development of insight commonly occurs as the patient becomes sufficiently relieved of his tensions and anxieties to get a new perspective on his problem. The development of insight is the emergence of a new perspective on the problem through which the patient better understands himself and his own actions.

In the process of reflection by the patient with the encouraging support of the physician, a new understanding of himself and his life situation develops in the patient and provides a more suitable framework for intelligent action than his hitherto overanxious, perplexed or defeatist view. This change may be promoted by interpretive suggestion by the physician when these suggestions are phrased in language and thought acceptable to the patient, and when the patient is ready for them. The consideration by physician and patient of what elements of the patient's past experience have led him to take the particular view that he does is commonly a most useful means toward aiding the patient to gain a new perspective on himself and his life-situation.

The fostering of courage and healthy self-belief is of the greatest importance. It is frequently a spontaneous result of gaining insight, because with insight what appears as an insoluble problem often becomes soluble. The self-reliant patient may need confidence in the physician only briefly, although even here we should recognize that the man with full confidence in one life-situation may lack confidence in another.

Self-belief also depends in part upon the belief in others and in part upon the experience of success. The physician's confidence in his patient is important as is his helping the patient to break down a task he has felt to be overwhelming into a series of steps which may be mastered, one after another.

It is this fostering or rebuilding of self-belief which gives the anxious patient courage to give up the support of the physician and go ahead on his own. Treatment is incomplete until the confidence of the patient is reasonably restored.

There is often need for encouraging a patient to develop new avenues of satisfaction, as in golf, tennis, handwork or hobbies. Such satisfactions may increase the resilience of the personality and enable him successfully to manage situations which would otherwise become intolerable.

Certain types of problems should be referred to the specialist. In general these include the psychoses, at least the pronounced psychoneuroses, all emotional disturbances of an intensity suggesting the risk of suicide, homicide or other untoward outcome, the addictions, and any cases departing widely from the experience of the nonspecialist or presenting unusual features. The nonspecialist should be particularly aware of the frequency with which physical complaints of health are the presenting complaints of a frank depression. When such a patient is discharged from the hospital and goes home to hang himself, his death is the result of a medical error no less than would have been the case had he died as a result of an athletic contest he was permitted to enter with a bad heart.

In making such referral the physician must be careful in his interpretation to the patient. Most patients are able to accept an interpretation that emotional factors have contributed to the problem and deserve exploration. On the other hand, the patient's reaction to an uninterpreted referral is too often an angry or defensive sentiment, expressed or unexpressed, "So you think I'm crazy! Well, you're crazy!"

The skillful practice of medicine in any field is impossible without constant utilization of the elements of psychotherapy. These are not new, although they have been more systematically developed in recent years. They cannot be regarded as the sole province of the specialist, although he should be expected to develop a superior skill in their utilization.

METASTATIC MELANOMA TO THE BLADDER WITH POSSIBILITY OF BEING PRIMARY IN THE THYROID GLAND

Report of a Case

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MELANOCARCINOMA of the thyroid gland has never been described in the literature. Melanocarcinoma in the negro is a very rare lesion. Only 8 such cases were found among 3,000 melanomas in the Tumor Registry. Metastatic lesions were observed in the kidney, but none were found in the bladder. For these reasons we feel that a case recently observed warrants this report.

REPORT OF CASE

The patient was an obese, 49-year-old colored woman, who had lived on a farm all of her life. In June, 1948, she noticed a slight swelling in the neck, most marked on the right side, above the sternocleidomastoid muscle. The mass gradually enlarged but produced no symptoms other than those associated with the size of the mass. Because of the fact that the "goiter" was growing larger, she consulted Dr. J. W. Bird. He advised a thyroidectomy which was performed on September 22, 1948.

Grossly the specimen consisted of a thyroid mass, 6 cm. in length, 4 cm. in width, and 4 cm. in thickness. The outer surface was smooth, and on section the central portion contained a dark pigmented mass separated by many trabeculae.

Microscopic sections through the tissue revealed a thin rim of thyroid tissue around the outer surface of the large central mass. Within the rim of tissue were many flattened acini lined by flat, cuboidal epithelium, containing a small amount of colloid. Within this same layer were scattered hemorrhages, with old blood pigment and an accumulation of chronic inflammatory cells. This tissue was separated from the larger mass by a relatively thick-walled capsule of fibrous tissue. The central mass was composed of a number of different types of cells. One type present was the young thyroid cell, forming nodules of fetal adenomatous tissue. Scattered between these nodules were large giant cells with bizarre nuclei. Their cytoplasm contained melanin pigment. Other cells were small and compact with basophilic nuclei. In still other areas the cells were more luxuriant and the nuclei larger, with prominent nucleoli similar to those seen in melanocarcinoma of the skin. In the central portion of the tumor necrosis was observed with deposits of melanin pigment remaining. Sections through various parts of the tumor revealed a similar picture. Considerable variance in the amount of tumor tissue was present in different areas. The number of mitotic figures, however, was relatively infrequent. Iron stains were negative, and bleaching processes removed the pigment.

> This is an extremely rare tumor, primarily because melanocarcinoma is rare in negroes and secondly because of its being an isolated lesion in the thyroid. It is extremely unusual for a melanocarcinoma to arise as a primary lesion.

Following her operation, the patient was again examined, with particular emphasis being placed on possible sources of origin of the tumor. Surgery had not been performed prior to the thyroidectomy. Her vision was normal, and she had not complained of headaches. There was no history of any oral lesion, gastrointestinal difficulty, or any other possible associated lesion. No skin lesions or pigmented nevi were found, and the skin was an even chocolate brown. No pigmented areas were found in the mucous membranes of the nose or throat. The vagina and rectum were examined, and nothing abnormal was found. A roentgenogram of the chest was normal. A fundoscopic examination of the eyes revealed no abnormalities, and the visual fields were not disturbed.

The patient remained symptom-free for 6 months, when profuse bleeding from the urinary tract was noted for the first time, and continued for 4 weeks. A cystoscopic examination on April 22, 1949, revealed a dark, pigmented papillary mass (see figure 1) on the posterior wall of the bladder. approximately 2 cm. superior to the interureteric ridge in the midline. Early invasion of the wall of the bladder was noted after the tumor had been resected through the urethra. Clinically, the mass was a pigmented mole and quite malignant. Sections from the excised mass consisted of a number of pieces of dark tissue, together with a few small nodules of white tissue. The pieces were 1 cm. in diameter as an average.

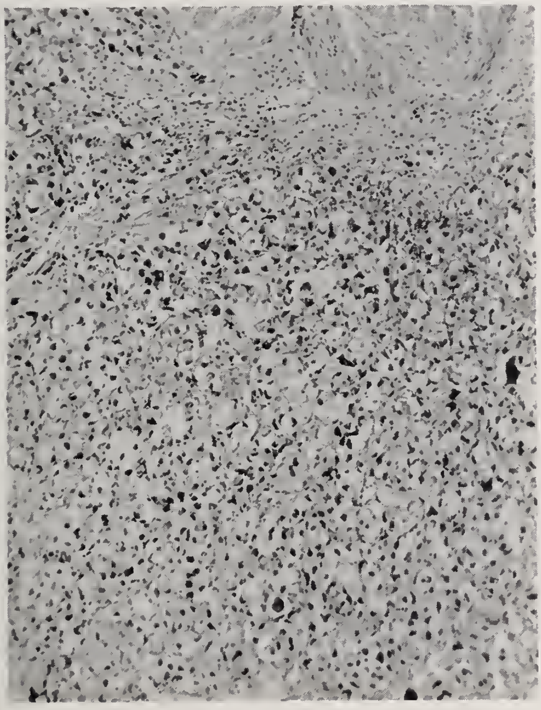


FIG. 1. Section through bladder wall in area of metastasis, showing muscular coat being infiltrated by large vesicular tumor cells. Majority of cells contain no pigment as is frequently the case in metastatic melanoma. A few scattered pigmented cells can be seen.

Microscopically, the tumor involved the bladder wall and infiltration of the muscularis was noted (see figure 2). The cells were large, with bizarre basophilic nuclei. Their cytoplasm contained varying quantities of melanin pigment. Many macrophages were noted, and acute inflammatory cells infiltrated the entire area. There was considerable necrosis of the tumor (see figure 3) with fibroblastic proliferation and scar tissue formation. The bladder mucosa was generally intact but in some instances was considerably eroded. The histologic diagnosis was melanocarcinoma of the bladder, metastatic from the thyroid gland.

The patient was discharged from the hospital free of symptoms on the third postoperative day. She gradually lost weight, and her appetite became poor. Three weeks later painful swelling developed in both legs, which became progressively worse. Difficulty in swallowing developed, and only liquids could be tolerated. At no time did she show any signs or symptoms referable to the eyes. Death occurred on July 4, 1949, 13 months after the appearance of the neck tumor.

The diagnosis was metastatic melanoma to the bladder with the possibility of its being primary in the thyroid gland. This diagnosis was concurred in by Colonel J. E. Ash.

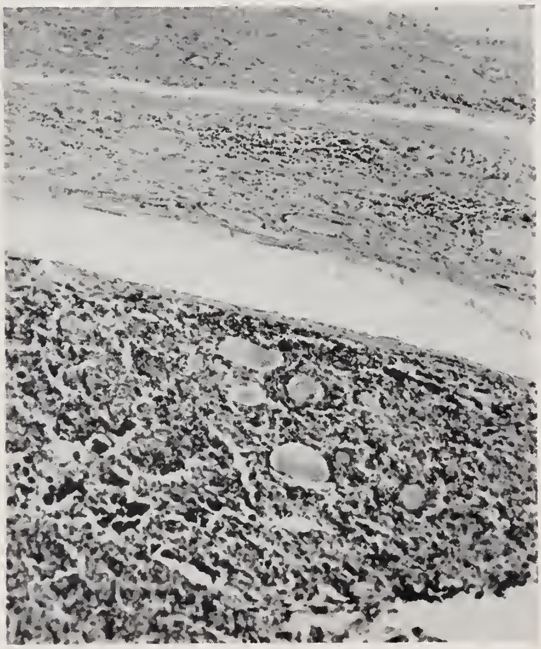


FIG. 2. Section through thyroid tumor in area of capsule, showing a thick fibrous connective tissue membrane containing a few thyroid acini lined by a low cuboidal epithelium; diffuse infiltration by small lymphocytes. Within the tumor itself the cells are variable in size and occluded by heavy concentration of melanin pigment which can be seen in small granules and heavy globules. Small thyroid acini can also be seen within the tumor itself.

DISCUSSION

This unique case follows a relatively typical pattern of a malignant melanoma. If the onset is thought to be at the time of finding the enlarged mass in the thyroid, there was a quiescent period of 8 months during which metastasis developed, finally with demonstrable evidence of metastasis to the bladder, the regional pelvis, and the lymph nodes of the abdomen. The thoracic lymph nodes were also affected and produced obstruction of the return of venous lymph terminally. The tumor was apparently primary in the thyroid gland. Proof is largely presumptive, but the evidence strongly supports the thyroid origin.

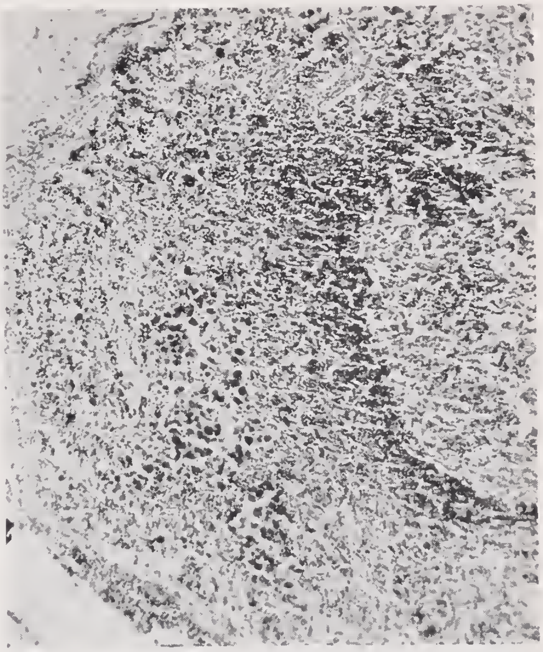
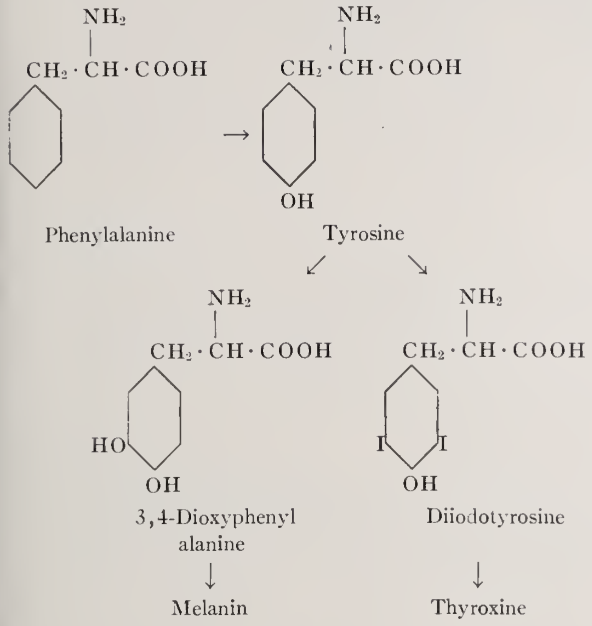


FIG. 3. Section through a lymph node adjacent to tumor, showing a typical secondary follicle with large metastatic tumor cells containing melanin pigment in the cortex and in the peripheral sinus. This is apparently an early evidence of metastasis from the thyroid tumor

Incorporation of the tumor within thyroid tissue with a capsule of thyroid gland and a mingling of thyroid acini within the tumor itself strongly favor that site as the origin of the tumor. The size of the original mass further adds weight to this hypothesis, and finally the absence of symptoms referable to the usual sites of primary melanocarcinoma favors the thyroid gland as the primary origin.

In discussing primary melanocarcinoma of the thyroid gland, a review of the pertinent literature indicates two possibilities. Gilmour,[1] Erdheim,[2] and Haberfeld[3] described in a number of instances cells of the parathyroid gland which contained pigment which is "not iron but has a brownish color." This pigment was contained within fibroblast-like cells of the parathyroid glands, and it has been suggested by all 3 authors to be melanin or a melanin-like pigment. Further, Fraenkel[4] and Kreglinger[5] reported 2 primary melanocarcinomas of the parathyroid gland. These 2 authors were of the opinion that the neoplasms were primarily tumors within the parathyroid gland. In the case reported by Kreglinger there were unpigmented metastases in other areas of the body. Both cases had primary pigmented lesions. Superficial consideration of the relationship of melanin-producing cells and thyroxin-producing cells of the thyroid gland would seem to be antipodal. However, when it was considered that both melanin and thyroxin have a common origin it becomes less difficult to postulate the possibility of thyroid tissue producing a melanin tumor. Melanin tumors usually oxidize either tyrosine or phenylalanine to the pigment. Tyrosine likewise by a process of iodinization may form thyroxin by union with a parahydroxyphenyl group. This produces a parahydroxyphenyl ether of tyrosine which has the iodine in the 3,5, and 3′, 5′ positions. There is, then, a similarity between the 2 materials. The close chemical relationship is further supported by recent evidence uncovered through work on synthetic sweetening agents. Fitzhugh and Nelson[6] found a melanin pigment in rat thyroids after feeding of 1-n-propoxy-2-amino-4-nitrobenzene, a synthetic sweetening agent. This pigment had all of the chemical reactions of melanin and was found in the thyroid epithelium and in the lumen. The apparent unusual relationship of the thyroid gland and the melanin tumor therefore is not so odd.

The following diagram shows the close relationship of melanin with thyroxin in its initial development and suggests the method by which a thyroid tumor could develop melanin pigment.


NH₂
CH₂·CH·COOH
Phenylalanine
NH₂
CH₂·CH·COOH
OH
Tyrosine
NH₂
CH₂·CH·COOH
HO
OH
3,4-Dioxyphenyl alanine
Melanin
NH₂
CH₂·CH·COOH
I
I
OH
Diiodotyrosine
Thyroxine

Summary

A case is described of an apparently primary melanocarcinoma of the thyroid gland which later developed a metastatic melanotic tumor in the bladder. References in the literature have been found of primary melanocarcinomas in the parathyroid glands, but no evidence of any previous melanocarcinoma of the thyroid gland has been noted. Chemically speaking, there is a close relationship between thyroxin-producing cells and melanin which may explain a possible relationship.

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President's Page

SOCIETY AND THE PHYSICIAN

VIII. The Physician and the Community

When I look around and see what an increasingly important part physicians are playing in nonmedical community activities, I am quite pleased. This is following in the footsteps of the family physician who was a "pillar" of his community—a healer, a confessor, and a solid citizen.

I can point with pride to one of our members who now is President of the Federation of Citizens' Associations. Another has distinguished himself on the Board of Education. Another spent endless hours on the annual Community Chest Fund Drive with the help of a number of his fellow physicians. Several physicians are active in their Parent-Teachers' Association work. Others are on the boards of various schools, the Boys' Club, the Boy Scouts, and many other character-building, religious, and welfare organizations.

It would be interesting to name all of these people by name, but hardly politic. Nevertheless, I point with pride to these men who are doing an excellent job of being good citizens in our community. I hope that the physicians of Metropolitan Washington never become "specialists" in the sense that they "know more and more about less and less," but rather that their interests and activities may continue to broaden both in medical and nonmedical fields.

The influence of the American physician need not be felt in the field of health alone but rather in every reasonable field of activity. Our influence is as broad as our horizon.

Frank D. Costenbader

First Midwinter Seminar

OF

THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

February 20 and 21, 1952

MEDICAL SOCIETY BUILDING 1718 M Street, N.W.

MODERN THERAPY: ACCEPTED METHODS AND FUTURE POSSIBILITIES

WEDNESDAY, FEBRUARY 20—AFTERNOON SESSION

Darrell C. Crain, M.D., *Presiding*

2:00 Cancer
Calvin T. Klopp, M.D.
Director, George Washington University Cancer Clinic; Assistant Clinical Professor of Surgery, George Washington University School of Medicine

2:30 Intractable Pain
Donald Stubbs, M.D.
Clinical Professor of Anesthesiology, George Washington University School of Medicine

3:00 Tuberculosis
Sol Katz, M.D.
Adjunct Clinical Professor of Medicine, Georgetown University and George Washington University Schools of Medicine

3:30 Intermission

3:45 Cardiac Arrhythmias
William L. Howell, M.D.
Assistant Clinical Professor of Medicine, Georgetown University School of Medicine

4:15 Toxemias of Pregnancy
Frank A. Finnerty, Jr., M.D.
Chief Resident in Medicine, Georgetown Division, Gallinger Municipal Hospital

4:45 Threatened Abortion
Richard H. Fischer, M.D.
Research Foundation, Doctors Hospital

WEDNESDAY, FEBRUARY 20—EVENING SESSION

Edward B. Tuohy, M.D., *Presiding*

8:00 Introductory Remarks
Frank D. Costenbader, M.D.
President, The Medical Society of the District of Columbia

8:05 The Davidson Lecture: The Amygdaloid Nucleus—A Clinical Study of Its Bilateral Ablation and a Theory as to Its Function
Jonathan M. Williams, M.D.
Associate in Neurosurgery, George Washington University School of Medicine

8:40 Panel Discussion on Modern Therapy of Psychiatric States
Winfred Overholser, M.D., *Moderator*
Superintendent, Saint Elizabeths Hospital

Discussants

Stanley H. Eldred, M.D.
Chestnut Lodge, Rockville, Md.

Zigmond M. Lebensohn, M.D.
Associate Professor of Psychiatry, Georgetown University School of Medicine

Isadore Rodis, M.D.
Associate Professor of Psychiatry, Georgetown University School of Medicine

James W. Watts, M.D.
Professor of Neurological Surgery, George Washington University School of Medicine

THURSDAY, FEBRUARY 21—AFTERNOON SESSION

Oscar B. Hunter, Jr., M.D., *Presiding*

2:00 Use of Whole Blood

Brig. Gen. Sam F. Seeley, MC, USA
Walter Reed Army Hospital

2:30 Parenteral Fluids Other than Whole Blood

Jacob J. Weinstein, M.D.
Associate in Surgery, George Washington University School of Medicine; Associate in Surgery, Gallinger Municipal Hospital

3:00 Gastrointestinal Bleeding

Hugh H. Hussey, M.D.
Associate Professor of Medicine, Georgetown University School of Medicine; Editor of G. P.

and

Paul Kiernan, M.D.
Associate Professor of Surgery, Georgetown University School of Medicine

3:30 Anemias

Jack J. Rheingold, M.D.
Clinical Instructor in Medicine, George Washington University School of Medicine

4:00 Intermission

4:15 Panel Discussion on the Use and Abuse of Some New Drugs

Wallace M. Yater, M.D., *Moderator*
Director, Yater Clinic; formerly Professor of Medicine, Georgetown University School of Medicine

Discussants

"Cardiology"
Joseph M. Barker, M.D.
Cardiologist, Yater Clinic
Assistant Clinical Professor of Medicine, Georgetown University School of Medicine

"Neurology"
Francis M. Forster, M.D.
Professor and Director of the Department of Neurology, Georgetown University School of Medicine

"Endocrinology"
Laurence H. Kyle, M.D.
Assistant Professor of Medicine, Georgetown University School of Medicine

"Pulmonary Diseases"
John W. Trenis, M.D.
Associate in Medicine, George Washington University School of Medicine

"Gastroenterology"
John C. Sullivan, M.D.
Assistant Clinical Professor of Medicine, Georgetown University School of Medicine

"Antibiotics"
Lt. Col. Edwin J. Pulaski, MC, USA
Walter Reed Army Hospital

"Allergy"
Eloise W. Kailin, M.D.
Associate Editor of Allergy Abstracts, *Journal of Allergy*

THURSDAY, FEBRUARY 21—EVENING SESSION

8:15 Special Business Meeting

8:45 Joint Meeting of the Medical Society of the District of Columbia and the Woman's Auxiliary

Speaker: **James T. Berryman**
Cartoonist, *The Evening and Sunday Star*, Washington, D.C.

Social Hour and Refreshments in the Library Will Follow

Editorials

THE HOSPITAL STAFF MEETING

Largely through the unremitting efforts of the American College of Surgeons, the standard of hospitalization has been raised to a very high plane, and much credit is due the respective Boards of Directors and the Medical Staffs for their earnest coöperation. There were, of course, many problems to be considered, one of which, and not the least, was the Staff Meeting.

Before the College engaged in this reorganization, hospital staff meetings were held at irregular periods, and the subjects for consideration were prepared with little relation to medical care and institutional efficiency. The staff meeting now occupies an important place in the management of the hospital, both from the medical and administrative standpoint. The College stipulated that meetings should be held monthly and with an attendance of at least 75 per cent of the staff. Few hospitals have measured up to this requirement, although most are making a diligent effort to do so To keep up the attendance, various schemes have been adopted, such as fines, voiding privileges, and failure of reappointment to the staff, and, on the reverse, furnishing luncheon for those in attendance.

The absenteeism is probably not due to loss of interest but can be laid at the door of professional duties and membership on the staffs of several hospitals. If staff members would limit their affiliations to one or two hospitals, instead of three or more, it would afford them more time for staff meetings and also create vacancies on the staffs of other hospitals which could be filled by qualified doctors, of whom there are many.

The subjects discussed at the meetings are often at great variance with the intent and direction of the College. The primary and almost sole purpose is to review and analyze the work of the institution with the view of improving the calibre of its product. It should not be content to enumerate the deaths for the preceding month, but should demand a full explanation of any unusual circumstance associated with the death, treatment, or management of any patient. Infections and reactions should be tabulated and measures adopted to keep them within the accepted rate of occurrence. There are a number of other items which could be presented, such as injuries and accidents to patients, complaints relating to their professional care, intern relations, and so on. The use of newer drugs, the application of advanced principles in surgery, and collateral specialties are also subjects of general interest but should not be the major topic of the meeting. Boiled down to a few words, the object of a staff meeting is to promote all measures that afford each patient the maximum chance of recovery by a review and analysis of the professional activities.

The administrator of the hospital should be present at staff conferences as there are many problems that invade and overlap the professional and administrative departments; there is no better place to discuss them than in a staff meeting.

The staff meeting does not by any stretch of the imagination replace the meeting of the local medical society or any of its affiliates or any independent association of medical men. When a hospital sends a notice that the next meeting will consist of a discussion of "interesting cases,"

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia it is certainly not conversant with the aims or directives of the College of Surgeons.

It may require some patience and determination on the part of the governing bodies to discard or revamp the old order, but if a hospital expects to maintain a high state of efficiency and receive accreditation as an approved institution, it can do so by putting its house in order. It can be done.

C.S.W.

WOMEN PHYSICIANS OF WASHINGTON

The November 1951 issue of the *Journal of the American Medical Women's Association* is of especial interest to all physicians of the Washington area. The Women's Medical Society of the District of Columbia, Branch One of the National Group, has provided the material for the November number. Dr. Elizabeth Kittredge was chairman of the special committee appointed for this purpose.

The issue is a very creditable one in all respects. The scientific papers were all prepared by women physicians of Washington. They include an article based on animal experiments in leukemia by Dr. Thelma Dunn; a study of the effect of anxiety on the electrocardiogram by Dr. Ruth Benedict; an extensive review article on allergy by Dr. Eloise Kailin; and two interesting case reports, one by Dr. Josephine Renshaw and the other by Dr. Margaret Callen. Dr. Alice Brigham described the operation of a home service for cancer patients. Mrs. Irene Kennedy, woman lawyer of Washington, explains the need for a new District law to provide equitable distribution of estates in instances of simultaneous death.

Dr. Kittredge has contributed a fascinating account, "The History of Branch One of the American Medical Women's Association." The Branch had its beginnings in 1909 with 15 women physicians present. Meetings have been held monthly almost without exception from 1909 until the present, usually in the homes of members. The purpose of the organization from its beginning has been scientific. The topic of the paper for October 1909 was "A Slight Review of Orthopedics" by Dr. Emma Erving, who is said to be the only woman orthopedist in the history of Branch One. Although the scientific aspect has predominated, the members have from time to time interested themselves in other things, such as woman suffrage, food conservation, white slave traffic, proper books for children, and chastity belts! Through the years the ladies have urged equal privileges for women in medical education and in hospitals, and today this equality is generally accepted.

Dr. Lois Platt has compiled some interesting statistics regarding "Women Doctors in Washington Today." She estimates that there are between 250 and 275 women physicians in the Metropolitan Area. As a result of a questionnaire distributed to them, with replies from 189, we learn that there are at least 172 white women physicians, 13 Negro, and 4 others in the Washington area. Sixty-three of these are under 35 years of age, 107 are 35 to 60, and 19 are over 60. Of the total number, 157 are in active, full-time medical practice, and 18 practice part-time. Only three of the entire group, in Dr. Platt's opinion, have not used their medical education adequately, and two of these did "active medical work" for five or more years. Fifty of the group have passed the specialty boards in their chosen fields; of these 14 are in psychiatry, 12 in pediatrics, 6 in pathology, and the remainder are broadly scattered, except that the surgical specialties are scantily represented. Twenty-two are employed by the District Health Department. One hundred and thirteen are married, in 51 instances to physicians; 7 are divorced; 24 under the age of 35 are single. Ninety-one have children, the total number of children being 181.

Also of interest are the data given on the status of women in the local medical colleges. The first woman physician graduated in the District in 1872, from Howard University; George Washington University graduated its first woman doctor of medicine in 1887, and Georgetown University gave its first M.D. degree to a woman in 1949. Currently (1950–51) 10 per cent of Howard's medical students are women, as compared to 6.9 per cent at Georgetown and 4.8 per cent at George Washington.

It is interesting to note that three members of the Washington Branch have served as presidents of the American Medical Women's Association: Dr. Louise Tayler-Jones, Dr. Kate Karpeles, and Dr. Mary O'Malley.

In the section entitled "Album of Women in Medicine," there are biographical sketches of Dr. Frances Foye and Dr. May Davis Baker, two of the women who have been most influential in the history of the local branch.

Dr. Kittredge deserves real credit for the excellence of the November number of the *Journal*, the monthly publication which has replaced the quarterly *Women in Medicine* of which she was formerly the editor.

Thomas M. Peery, M.D.

FLUORIDATION OF COMMUNITY WATER SUPPLY

One of the most prevalent diseases yet to be controlled is dental caries, which affects almost the entire population. Although dentistry has made phenomenal progress in the development of newer technics and procedures for better dental health, until recently it did not have the benefit of specific control measures. The findings of the Selective Service in World Wars I and II clearly indicated that the dentists were faced with a problem which required drastic control measures. The annual increment of untreated dental caries has resulted in increased tooth mortality. The child population receives only about one third of the fillings required and the remaining two thirds are neglected. Sixteen-year-olds have an average of 9 decayed teeth with a loss of several others.

The acceptance of the caries fluorine hypotheses is the result of exhaustive epidemiologic studies and constitutes a milestone in public health and preventive dentistry. Historically, the possible relationship of fluorides and dental caries was postulated by Sir Chrichton-Brown of England just before the turn of the century. A similar observation was made by a U. S. Public Health Officer attached to the United States Consulate in Naples, Italy, in 1901. Dr. Frederick McKay, a New York dentist who spent his summers in Colorado, called attention to the extensive mottled teeth in that area and suggested that there might be something in the water responsible for this defect. The early observations of Dr. McKay (1908–1915) undoubtedly were the forerunner of the extensive research that followed. Fluorine as an element was first observed in water in 1931 by an industrial chemist.

Since that time epidemiologic studies were conducted in widely separated parts of the United States. It was conclusively proved that the use of fiuoridated drinking water during the formative period of the teeth is associated with a 60 to 65 per cent reduction in dental caries experience. The results of these studies indicated that not only was 1.0 ppm. in the drinking water an optimum concentration for caries control but well within the limits of safety. All investigations revealed that there were no toxic evidences of fluorosis within safe limits. Further, it was observed that a concentration of 1.0 ppm. of fluoride in public drinking water supplies effected maximum protection against dental decay. In 1945, studies to determine the caries prophylactic value of artificially fluoridated drinking water were started in Grand Rapids, Michigan and in Newburg, New York. Numerous additional study projects have been initiated in the United States since then. All of these studies have produced positive and comparable results.

The procedure of water fluoridation in the control of dental caries has received widespread approval of professional and scientific groups. The American Medical Association, the American Dental Association, the American Public Health Association, the State and Territorial Health Officers, the Conference of State Dental Directors, the United States Public Health Service, and the National Research Council have all endorsed and approved this procedure.

Between three and four million people in the United States have been drinking water containing fluorides all of their lives and have suffered no ill effects except dental fluorosis in those areas having high concentrations of fluorides in the water. At the concentrations recommended for fluoridated water supplies, there is no discoloration of the teeth. In fact, people who have consumed water containing the recommended amount of fluoride have unusually attractive teeth.

Fluorides are compounds formed by fluorine combining with other elements. These compounds include sodium fluoride, calcium fluoride, potassium fluoride, magnesium fluoride, and others. Other combinations form silicofluorides. Fluoride does not add taste, color, odor, or hardness to water. Even at higher concentrations, the use of fluoride-bearing water has had no known effects in industrial processes. Chlorination does not interfere with the beneficial effects of fluoridation.

The exact mechanism by which fluorine compounds provide protection against dental caries is not definitely established. Research on this problem has suggested three hypotheses:

1. Fluoride lowers the solubility of tooth structure.
2. Fluoride inhibits the bacterial or enzymatic processes that are believed to dissolve the protein and calcified substance of the tooth.
3. Fluoride changes the bacterial flora of the mouth, thereby reducing the number of acidogenic bacteria that are associated with the caries process.

It is possible that any one or a combination of these actions results in a greater resistance to caries.

To summarize the whole procedure, it can be said that:

Fluoridation of community water supplies represents a significant advance in public health practice. By the relatively simple procedure of controlling the fluorine concentration of potable water it is possible to reduce dental caries by 65 per cent and to reduce tooth mortality to a reasonable limit. The technic involved is relatively simple and can be accomplished at a low cost. Extensive research has proven the procedure to be safe when properly administered and that it will provide the greatest benefit to children from birth up to age 8 during the calcification period of the teeth. There is no odor or taste to the water and industrial procedures are not known to be affected.

The Commissioners of the District of Columbia have approved the recommendation of the Director of Public Health to fluoridate the local water supply, and an appropriation of $130,000 was secured for this fiscal year. Equipment has been purchased and will be installed in the Dalecarlia Filter Plant. The chemical has been purchased and it is anticipated that fluoridation for the District of Columbia will begin on or about March 15, 1952.

A. Harry Ostrow, D.D.S.
Director, Bureau of Dental Services,
D. C. Health Department

HEALTH DEPARTMENT HIGHLIGHTS, 1951

Constant improvement of the health of the residents of the District of Columbia is the prime objective of the Health Department's services. Because of variations in measuring devices and because of the long-term factors involved, achievements in public health are not always evident. It is only during years immediately following decennial census enumeration that full dependence may be placed upon population figures.

Residents of the District enjoyed a successful year in 1951 from a public health point of view—a year in which the citizens of this city may justly take pride. The provisional general death rate (deaths from all causes) is lower in 1951 than it was in 1950. Deaths due to selected causes generally showed a decrease. Maternal mortality rates continued to decline to the lowest rate ever recorded. The tuberculosis death rate shows the greatest reduction ever occurring in Washington in any one year. Deaths due to heart disease and cancer show a lower rate than the year 1950. Deaths due to pneumonia and influenza and poliomyelitis also showed a decline. More births were recorded in the District, more than one third of which were to mothers residing outside the District boundaries. And while there were more cases of scarlet fever, whooping cough and chickenpox, there were fewer cases of pneumonia, influenza, poliomyelitis and measles recorded.

VITAL STATISTICS

With a birth to a resident mother occurring every 26½ minutes and a death to a resident occurring every 64 minutes, there was a natural increase of 11,556 persons in the District of Columbia during the year just closing. Daily there were 54 births and 22.4 deaths, making a total of 19,773 births and 8,217 deaths to District residents.

The resident birth rate per 1,000 population, therefore, is estimated to be 24.0, which is 0.1 below the 1950 figure, and 0.7 below the all-time high rate of 24.7 births per 1,000 population recorded in 1947. These rates refer to births to resident mothers *only*. The crude birth rate, uncorrected for residence, was higher than in any previous year. The uncorrected rate per 1,000 population, that is, births recorded in Washington in 1951, was 37.0. Numerically there were 30,524 births recorded here, nearly 1,600 greater than the number recorded in 1950.

The provisional death rate for 1951 for residents of the District is somewhat higher than the mortality recorded in 1950, 10.0 as compared to 9.6. Numerically there were 7,679 deaths recorded in 1950 whereas in 1951 there were 8,217 deaths recorded for residents only. For deaths occurring in the District, including resident and nonresidents, a total of 8,978 occurred here in 1951, while in 1950 there were 9,012 deaths recorded. The death rate, from all causes, for 1951 for all deaths which occurred in the District is estimated to be 10.9 per 1,000 population; in 1950 the death rate, uncorrected for residence, was 11.2 per 1,000 population.

The infant death rate for 1951 approached the previous low record of 1948. In this past year the 757 infant deaths gave a rate of 24.8 per 1,000 live births, while in 1948 the infant death rate was 23.9 per 1,000 live births. There was a reduction of 0.4 from last year's recorded rate of 25.2 deaths per 1,000 live births.

Closely related to infant mortality is maternal mortality. The record attained in 1951 is the lowest ever recorded for Washington. This is the third consecutive year that the same claim may be made; each year there was a 0.1 decline. The maternal rate for this past year was provisionally set at 0.3 per 1,000 live births with only 10 deaths due to childbirth or its complications. This is a 16⅔ per cent reduction from the 12 deaths recorded from this cause in 1950.

From table 1, showing recorded live births, deaths from all causes, and deaths from selected causes, it may be noted that progress has been made in the attack against many diseases in the District in the past year.

A sharply significant decline was noted in the death rate from all forms of tuberculosis during the past year. The death rate dropped from 48.4 per 100,000 population to 36.4 in the year just closing. This is a reduction of 24.8 per cent, and the greatest reduction in the tuberculosis death rate ever recorded in the District in any 12-month period. It is the greatest rate decline recorded in the major causes of death during the year. Early provisional reports for tuberculosis indicate a decline in the national rate, also. This is probably one of the long-term factors evidenced in the over-all improvement of health in Washington. The reduction in the tuberculosis death rate gives hope that with improved medical and surgical technics, greater use of antimicrobial agents, and increased activity in case-finding projects, supported by more enlightened public understanding and coöperation with medical and health agencies, there can be an even lower tuberculosis death rate than that recorded this year. Tuberculosis is still responsible for more deaths than are any of the other communicable diseases. However, it should be recognized that the ultimate goal is prevention of the disease rather than only the prevention of deaths. Much effort is still necessary to find cases early since, as in all diseases, early detection means early cure.

TABLE 1

Vital Statistics for the District of Columbia, 1951 and 1950

	1951 ESTIMATED		1950	
	Number	Rate	Number	Rate
Deaths, all causes*	8,978	10.9	9,012	11.2
Deaths, all causes* (corrected for residence)	8,217	10.0	7,679	9.6
Live births*	30,524	37.0	28,926	36.1
Live births* (corrected for residence)	19,773	24.0	18,099	24.1
Infant mortality†	757	24.8	729	25.2
Maternal mortality†	10	0.3	12	0.4
Deaths from specific causes‡				
Heart disease	2,997	363.2	3,253	405.5
Cancer, neoplasms, malignant	1,471	178.3	1,431	178.4
Accidents	384	46.5	432	53.9
Tuberculosis, all forms	300	36.4	388	48.4
Pneumonia and influenza	199	24.1	223	27.8
Diabetes	104	12.6	130	16.2
Syphilis	62	7.5	84	10.5
Meningococcal infections	9	1.1	8	1.0
Poliomyelitis	4	0.5	17	2.1
Whooping cough	2	0.2	1	0.1

SOURCE: Bureau of Vital Statistics, D. C. Health Department.

* Per 1,000 population

† Per 1,000 live births

‡ Per 100,000 population

Syphilis deaths were fewer in the past year, reducing the death rate from 10.5 in 1950 to a current rate of 7.4. The number of deaths due to syphilis were 84 in 1950 and 62 in 1951.

Acute communicable disease deaths present a gratifying picture this past year. There were no deaths from scarlet fever, diphtheria, or measles. Nor were there any deaths in 1950 from these diseases. Meningococcal infections caused 9 deaths this year. Only 4 deaths were due to poliomyelitis this past year while there were 17 in 1950. The number of deaths caused by pneumonia and influenza were less this year than last, 199 to 223, which shows a death rate reduction from 27.8 in 1950 to 24.1 (per 100,000 population) in 1951.

Deaths due to cancer and other malignant neoplasms show a slight rate reduction, from 178.4 in 1950 to 178.3 in 1951, in spite of an increase in the number of deaths from cancer. Cancer continues to be the Number Two Killer in Washington.

Heart disease deaths totaled 2,997 in 1951, for a death rate of 363.2 per 100,000 population, as compared to 3,253 deaths from heart disease in 1950, with a rate of 405.5. Heart disease continues to be the Number One Killer again this year.

Until considerably more progress can be made in the attack on heart disease and cancer, which diseases this year caused 49.8 per cent of all deaths in Washington, and a major share of the deaths throughout the Nation, the general death rate in the District of Columbia will remain at about its present level—just above or just below 10.0 deaths per 1,000 population.

CONCLUSION

The goal of the Health Department of the District of Columbia is the prevention of illness, injury and premature death and the attainment of optimum health. This appeals equally to the rich, the middle class, and the poor. To approach such a high goal is the aim of those charged with the responsibility of public health in the Nation's Capital. Many disciplines, among them, medicine, dentistry, nursing, engineering, the various laboratory sciences, statistics, education and administration, must wholeheartedly coöperate in this task. The Health Department which embraces these disciplines can remain progressive only when alert to community needs. The achievements referred to in this brief discussion indicate that every attempt is being made to discover community needs and to meet them within our sphere of activity. With the wholehearted support, the untiring coöperation, and the concerted action of professional medical groups and of the people of the Nation's Capital, the Health Department can continue to achieve gratifying results in serving this community.

J. EDGAR CASWELL
Director, Bureau of Public Health Education, D. C. Health Department

In and Out of Focus

BY THE OBSERVER

Another First Developments which led to the discontinuance of the Medical Society's Wednesday night meetings and the inauguration of a two-day midwinter scientific meeting were reviewed in this column some months ago (see "Scientific Program Revamped," September, 1951 MEDICAL ANNALS). In a special report to the Society on October 21, 1951, the Executive Board elaborated further on this change emphasizing its experimental nature.

In line with the Board's recommendation, the first Midwinter Seminar will be held in the Society's auditorium on Wednesday and Thursday, February 20 and 21, 1952. While the Seminar will not be as ambitious an undertaking as the ANNUAL SCIENTIFIC ASSEMBLY, it may well become of equal importance to the medical profession in Washington. Basis for this assertion is the fact that the following features of the coming Seminar will undoubtedly become permanent.

¶ The program will be of a practical nature and will consist largely of talks on new and accepted methods of therapy. Those attending the Seminar will be given an opportunity to take part in the discussion. Talks are limited to 20 minutes and will be followed by a 10-minute question period.

¶ The Seminar will be an all-local event, every physician on the program being on staffs of local hospitals or engaged in private practice. Those attending will therefore be in a position to evaluate the best clinical and investigative work in the District of Columbia.

¶ The Seminar will close with a joint meeting of the Society and the Woman's Auxiliary on Thursday evening, February 21. James T. Berryman, cartoonist of *The Evening Star*, has accepted an invitation to speak. His talk will be followed by a social hour and refreshments in the library.

The Seminar program will be found on pages 89–90. An examination of it will reveal what an excellent job has been done by the Program Committee, of which Dr. Darrell C. Crain is the Acting Chairman. Serving with him are Drs. Seymour Alpert, William S. Anderson, Irving Feldman, Herbert S. Gates, William L. Howell, Paul Kiernan, David H. Kushner, Arthur A. Morris, Jr., William R. Stovall and Jacob J. Weinstein. Because of the demands made upon his time, Dr. Edward B. Tuohy, Chairman of the Committee, found it necessary to ask Dr. Crain to carry on for him.

The Committee has endeavored to develop a program of equal interest to the specialist and the general practitioner. It believes that it has succeeded and that the attendance at the Seminar will more than justify its expectations. Your Observer shares this optimism and is confident that there will be many successful Seminars in the future.

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The President's New Commission

The AMA lost no time in condemning President Truman's recently created Commission on the Health Needs of the Nation. President John W. Cline fired a broadside charging the President with playing politics with the "medical welfare" of the American people. Dr. Cline said, "This is a shocking attempt to give White House sanction to the brazen misuse of defense emergency funds for a program of political propaganda, designed to influence legislation and the outcome of the 1952 election." Dr. Gunnar Gundersen, able Chairman of the AMA's Executive Committee, who, it was reported, had accepted an appointment to the Commission, promptly refused to serve. He was no less critical of the President because he said the Commission was in his opinion "an instrument of practical politics."

This hostile reaction came as a surprise to many people, including a number of physicians, principally because a nationally known physician and a loyal friend of the medical profession, Dr. Paul B. Magnuson, former Medical Director of the Veterans Administration, had been appointed Chairman. Some thought Dr. Cline's statement intemperate and that it would offend Dr. Magnuson, which it did.

In a public statement issued concurrently with the Executive Order creating the Commission and defining its duties, the President said: "The Commission has one major objective. During this crucial period in our country's history it will make a critical study of our total health requirements, both immediate and long-term, and will recommend courses of action to meet these needs."

The President specifically instructed the Commission to investigate and submit its recommendations with respect to the following:

1. Present and prospective supply of physicians, dentists, nurses and other medical people and the ability of schools to provide what is needed.

2. The ability of local public health units to meet the demands of civil defense requirements.

3. Problems created by the shift of workers to defense-production areas which would require relocation of medical personnel.

4. How existing and planned medical facilities meet present and prospective needs.

5. Present research activities in the field of health and the research program needed.

6. The effect on maintaining health standards of actions taken to meet long-range military, civil defense and veterans' requirements.

7. *The adequacy of private and public programs designed to provide ways to pay for medical care.*

8. How much the Government should contribute to local governments for health purposes.

The President's announcement had hardly made the newspapers when the AMA responded. As might have been expected there was considerable editorial comment. Your Observer has selected what to him were significant portions of editorials which appeared in *The New York Times*, *The Evening Star* (Washington), and *The Washington Post*.

On December 30, 1951 *The New York Times* editorialized:

"President Truman has taken what should be a forward step toward breaking the deadlock that has existed on constructive action for a positive health program. . . .

"The ability, stature and reputation of the membership of the new commission, which is to be headed by Dr. Paul B. Magnuson, insure the professional knowledge and maturity of judgment that will be needed to make workable recommendations for solving some of these problems. It is a Commission in which both the public and the health profession can have confidence.

"The task which Dr. Magnuson and his colleagues face is a difficult one which has too frequently in the past been marked with emotionalism rather than facts and sound judgment. The new Commission will be rendering a valuable service if it can clear away the confusion that now exists and give us a positive program on which all segments of our Society can work together."

The Washington Post for December 31, 1951 observed:

"In the long and bitter dispute between the advocates of compulsory national health insurance and the American Medical Association, the forgotten man has been the citizen in need of more and better medical care. As one perceptive doctor put it, 'We have licked Oscar Ewing, but not the problem.' That is why a new approach is vital, and why President Truman's appointment of a 15-member Commission on the Health Needs of the Nation comes as a breath of fresh air.

"Along with distinguished members of the medical profession as well as lay citizens, Mr. Truman has named a man of great stature to head the new commission. Dr. Paul B. Magnuson was already an outstanding orthopedic surgeon when he built a brand-new reputation in the Veterans Administration for providing the veteran with the best medical care obtainable anywhere. It was Dr. Magnuson who enlisted the help of the country's leading medical schools on a coöperative basis. Not only does the new appointment make use of Dr. Magnuson's persuasion and talent, but it also helps repair the slight done him in his summary discharge by Veterans Administrator Gray a year ago.

"It is also to Mr. Truman's credit that he has learned from experience. Too infrequently does he abandon a dead horse. Yet in this case he seems to have seen clearly, as others have, that the Ewing plan for national health insurance is hopelessly defunct. The elaborate efforts of the AMA to defeat this plan have resulted in nothing better, however, and that fact certainly justifies a new and independent approach."

On January 2, 1952 *The Evening Star* in an editorial entitled "For a Healthier America" said:

"Although the doctor chosen to represent the AMA has declined to serve because of a belief that Mr. Truman has acted only for self-serving political reasons, the Commission's membership is distinguished enough to indicate that it should do a good job in carrying out its directive to listen to the advice of all viewpoints, make a searching and objective inquiry into the facts, and report formally on its findings within the next 12 months. Certainly, the chairman of the group deserves the confidence of those who have been accusing the administration of wanting to enact 'socialized' medicine. He is Dr. Paul B. Magnuson, former Medical Director of the Veterans Administration and a leading opponent of the proposal for compulsory health insurance or anything else smacking of the British system. In the circumstances, it is difficult to understand why the AMA's president has branded the whole study project as 'a shocking attempt' to play politics."

Finally, on January 8, 1952, *The Washington Post* published an editorial warning that:

"The danger is, if the opposition of the AMA to any sort of change persists, that the country some day may be saddled with an inferior scheme which would meet neither the objection of the doctors nor the real needs of the public. We cannot believe that the sour comment of the AMA head reflects the true attitude of American doctors who respect their pledge to serve the sick irrespective of circumstances. Some sort of better arrangement for medical care of families of low income is bound to come. The determination of the health commission to look realistically at all aspects of the problem could be greatly reinforced by positive coöperation instead of negative criticism on the part of the medical association."

Dr. Magnuson, being the type of man he is, will not be deterred by criticism from carrying out his assignment. One can therefore prognosticate with more than a fair degree of certainty that unless there is a meeting of minds in regard to the Commission, stormy days are ahead.

In view of this probability the personnel of the Commission is of considerable interest. Here are their names and affiliations:

Dean A. Clark, M.D., General Director of the Massachusetts General Hospital, Boston.

Joseph C. Hinsey, Ph.D., Dean of the Cornell University Medical College, New York.

Russel V. Lee, M.D., Associate Clinical Professor of Medicine, Stanford University School of Medicine, San Francisco.

Evarts A. Graham, M.D., surgeon, St. Louis, Missouri.

Marion W. Sheahan, R.N., Director of the National Committee for the Improvement of Nursing Services, New York.

Ernest G. Sloman, D.D.S., President-elect of the American Association of Dental Schools, San Francisco.

Walter P. Reuther, President of the United Automobile Workers, C.I.O., Detroit.

A. J. Hayes, President of the International Association of Machinists, Washington.

Clarence Poe, President and editor of *The Progressive Farmer*, Raleigh, N. C.

Charles S. Johnson, President of Fisk University, Nashville.

Lowell J. Reed, Ph.D., Vice President of the Johns Hopkins University and Hospital, Baltimore.

Chester I. Barnard, President of the Rockefeller Foundation, New York.

Elizabeth S. Magee, General Secretary of the National Consumers League, Cleveland.

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Our Friend Oscar

In the course of thirty years' association with the medical profession, your Observer has become acquainted with hundreds of physicians throughout the country. As full-time secretary of two urban medical societies, he has come to know many of them intimately. His closest relationships have naturally been with officers and committee members of these organizations whom he has observed under all sorts of circumstances. Without exception he has found them to be the highest type of professional men. Some, it is true, possessed more talent for medical leadership and organization work than others, but all of them had one thing in common: They were unselfish in their devotion to the organizations they served.

Dr. Oscar B. Hunter, whose recent death is lamented by physicians in all parts of the country, ranks high on your Observer's list, not only as a doctor but as a man of unusual and diverse talents. Organizational problems were no mystery to him for he had met and solved most of them. He understood the intricacies of finance better than most laymen. But above and beyond these, he had vision and the drive and the ability to make his dreams a reality. Doctors Hospital and the surrounding medical buildings are among the monuments to this dynamic personality who refused to accept failure even when it seemed inevitable.

Usually when one says about a man who has recently died, that his place cannot be filled, it is little more than a sentimental expression. Time passes and memories fade, and soon the person, fine and able though he was, is forgotten except by his family and close friends. Of Oscar it can be truly said, his contributions to medicine and the community were so vital and tangible that those who are a part of the present medical scene will always be conscious of the void created by his death.

Others will write more eloquently about Oscar. Your Observer only wishes to testify that the Medical Society never had a better friend. Whenever the Society called upon him for help, and that was often, Oscar responded willingly and generously. Incidentally, few members will ever know how much he gave in time and money to the Society. In many instances projects sponsored by our organization would have failed had it not been for his timely assistance.

Oscar should have a special niche in the heart of every member of our Society, for the Society owes him much. As for your Observer, he will always remember Oscar as a generous and trusted friend who never failed him.

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"...Words Are a Bridge..."

It is odd the things one remembers. Your Observer recalls a Methodist minister in a small Wisconsin village where he once lived who had been an English instructor at the state university. The minister was well thought of by most of his parishioners, many of whom were impressed by his unusual educational qualifications. There were differences of opinion, as there usually are, in regard to the quality of his sermons. Some thought him too highbrow, others said his sermons lacked depth, but on one point they were in agreement, he was a humdinger when it came to the use of words.

On closer acquaintance with the minister your Observer discovered that words held an unusual fascination for him. His modest home was without a study so he had placed his large Webster's Unabridged Dictionary on a pedestal purchased for the purpose in his living room. There each day he devoted a period to his favorite pastime, enlarging his vocabulary.

Such a hobby holds little interest for most of us, but no matter how restricted our vocabulary, certain words arouse our deepest feelings—anger, resentment, enthusiasm or affection. Frequently we become so attached to certain words that we use them to excess. Your Observer recalls a close friend, a dean of a medical school, who had a particular affinity to the word "particular" only he pronounced it "perticulor." He used it so often it became closely associated with him.

These and other thoughts on words were stimulated by a highly interesting lecture delivered by Lady Violet Bonham Carter before the Royal College of Physicians in London last November.* In her opening remarks Lady Carter said:

"There is almost nothing, good or bad, you cannot do with words, if only you know how to use them. Those who are masters of that subtle craft wield terrifying powers, for good and evil, over the lives of men."

She then proceeds to discuss three media in which words can have a profound effect: public speaking, broadcasting and books. Your Observer has culled the following from her observations.

On Public Speaking

"I think there are very few 'golden rules' in public speaking. It is an art in which, more almost than in any other, everyone must work out his own salvation. There are, however, a few simple precautions which ought to save one from overwhelming disaster. I try to recall a few for my own use.

"First, try at the very outset of your speech to betray yourself somehow to your audience. Get on to personal terms with them, and they will forgive you —perhaps not everything—but at least a good deal.

"Next, make them feel that your speech is not a recital or a performance but a coöperative business, a partnership in which they are playing an important part; that they are influencing it all the time; and that if you were speaking to any other audience in the world it would be a different and probably a very inferior speech."

On Preparing to Speak

"The whole problem of preparation is again one which every individual must settle for himself. When people tell me that they never prepare their speeches I never believe them. If I did I should be very sorry for their audiences. Personally I think it is an insult to an audience not to prepare. There is no excuse whatever for exposing several thousand people to the risk of one's random thoughts, expressed in one's random words. . . .

"To be really effective a speech must have form. It must have a beginning, a middle, and an end; above all it must have a climax. And these things rarely fall into their right places by accident. Perhaps the ideal recipe is the one attributed to John Bright: 'You should have islands—and swim between them.' "

On Mr. Churchill

"Some of his speeches deserve to rank with those of Pericles, and they will live as long. And yet to call them 'classics' does not quite describe them. For Mr. Churchill combines a classic form and balance with a fire and colour which are his own alone. There lurks in every sentence the ambush of the unexpected. His style has the dynamic quality of action. Let us remember together some words of his whose echoes will ring through English history.

> 'When I look back on the perils which have been overcome, upon the great mountain waves through which the gallant ship has driven, when I remember all that has gone wrong, and remember also all that has gone right, I feel sure we have no need to fear the tempest. Let it roar, and let it rage. We shall come through.' "

On Broadcasting

"It is at once the most universal and the most intimate medium of approach to human beings that exists.

"For though you may be broadcasting to millions you are not speaking to them in the mass. You are not appealing to a crowd or a mob. You are speaking to them,

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* Published in the December 1, 1951 issue of *The Lancet* (London) under the title, "The Power of Words."

Calendar of Meetings, December 16–January 15

December 17	Executive Board
	Obstetrical Board
	Ruffin Bequest Fund Committee
December 18	Grievance Committee
	D. C. Chapter, American Academy of General Practice
December 26	Medical Service of D. C.
January 2	Executive Board, Woman's Auxiliary
January 3	Section on Neurology and Psychiatry
	Executive Committee, Gallinger Hospital
January 5	Washington Psychoanalytic Society
January 7	Committee on Revision of Fees, Medical Service of D. C.
January 8	Committee on Public Health
	Medical Officers' Reserve Units
	Lay Society, Diabetes Association of D. C.
January 9	Woman's Auxiliary
January 10	Washington Psychiatric Society
January 11	Committee on Public Policy
	Section on Dermatology and Syphilology
January 12	Washington Psychoanalytic Society
January 13	Washington Orthopedic Club
January 14	Committee on Blood Banks
	House Committee
January 15	Grievance Committee

each one of them, individually in the privacy of their own homes. You are, so to speak, having a simultaneous tête-a-tête with several million people.

"To realize this fact is the secret of good broadcasting. Few politicians have yet grasped it, and that is why they are so often indifferent broadcasters. Some of them are still apt to treat the microphone as if it were a rostrum or a platform at a public meeting. They have still to learn that a broadcast must not be a speech, or a leading article, or an essay. It must be a talk.

"If you think back to all the most successful broadcasts you have listened to, I think you will agree that what they have all had in common was this quality of intimacy—of naturalness. The object of a broadcaster should be to 'come across' exactly as he is. In order to do this successfully he must either be completely natural and unselfconscious, or else a very great artist who can appear so."

On the Written Word

"Once the imagination has played its part in creation, what part is played by words, by style, in reaching the imagination of the readers?

"Now here we get very varying opinions from various writers. Some took endless pains with their style; others apparently took none at all. Samuel Butler, for instance, says:

> 'I should like to put it on record that I never took the smallest pains with my style, have never thought about it, and do not know or want to know whether it is a style at all. I cannot conceive how any man can take thought for his style without loss to himself and his reader.'

And Trollope, whom I have already quoted, agreed with him. He thought that 'a man who thinks too much of his words as he writes them, will generally leave behind him work that smells of oil.' H. G. Wells said: 'I write as I walk, because I want to get somewhere, and I write as straight as I can, just as I walk as straight as I can, because that is the best way to get there.'

"Sheridan, on the other hand, expressed the view that 'easy writing makes damned hard reading.' Walter Savage Landor said: 'I hate false words and seek with care, difficulty and moroseness for those that fit the thing.' Flaubert used to spend months of agony trying to compose a few sentences.

> 'You don't know what it is' (he wrote to George Sand) 'to stay a whole day with your head in your hands trying to squeeze your unfortunate brain so as to find a word. . . . Ah, I certainly know the agonies of style.'

"Tolstoy said that 'One ought only to write when one leaves a piece of one's flesh in the inkpot each time one dips one's pen.' But Turgenev had a far rosier recipe. He said that in order to write he had always to be a little bit in love. 'Now I am old I can't fall in love any more and that is why I have stopped writing.'

"Well, would-be writers—there you have the differing prescriptions of these different masters to choose from. You can try leaving a bit of your flesh in the inkpot; or, if you prefer it, you can fall in love."

In summing up, Lady Carter said: "If I were forced to put into a few words all that I have tried to say, I think it is that words are a bridge across both space and time. Just as the spoken word in broadcasting has conquered space and made all men our neighbors, so the written word, preserved in books, has conquered and annihilated time."

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"...Our Greatest Bulwark..."

Dr. John W. Cline of San Francisco, President of the American Medical Association, is, without doubt, one of the most articulate spokesmen in the history of the Association. He is an able and forceful speaker who minces no words in belaboring his opponents. Few can dress down so-called socializers more eloquently than he.

Whether or not one agrees with his bitter denunciation of those who disagree with AMA policies, he cannot be charged with being merely an obstructionist. On the contrary, physicians throughout the country might well ponder the following statement made by him in an address before the House of Delegates at Los Angeles last December. Dr. Cline said:

> "Scientific medicine in the United States has progressed to a point never reached before at any place in the world. Our standards of medical education and medical care have never been equaled and these are the developments wrought by a free profession and educational institutions unhampered by governmental control.
>
> "The principal problem has been and, to a large extent, remains how best to distribute these advantages to all the people. In the main the approach is through voluntary health insurance. The growth and development of plans offering this coverage has been gratifying. When one realizes the short space of time in which this has been achieved it must be considered to represent satisfactory progress.
>
> "More than 77,000,000 people now have some coverage against the costs of illness. About 22,000,000 are enrolled in Blue Shield and other medically sponsored plans and 44,000,000 in Blue Cross plans. This growth has been phenomenal. More than half our population has protection from the economic hazards of illness.
>
> "On the other hand we must not only expand the numbers enrolled but improve our plans. The exact direction which the improvement should follow is not equally clear. As of this time, no one can say what will constitute the most desirable coverage in the future. The multiplicity and diverse nature of the plans creates a healthy situation. The very elasticity of the programs permits and encourages experimentation. The orderly process of evolution will produce a form which at some future date will be generally agreed upon as embodying the most nearly ideal type of coverage. This process will not be limited by the legal enactments or the arbitrary decisions of government agencies inherent in any scheme of socialized medicine.
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> "Certain plans have developed catastrophic coverage which has proven workable and the approach has been somewhat different in various parts of the country. More needs to be done in this direction and unquestionably will be done.
>
> "A few plans have begun experiments designed to include the older age groups and on an individual basis. More must and will be done along this line. We must proceed with cautious determination to find methods which will provide realistic coverage without endangering the solvency of our plans. The experience gained by numerous limited enrollments ultimately will demonstrate a satisfactory method free from the hazards of any all-inclusive, extensive plans blindly applied to large numbers.
>
> "The vast majority of our members support the prepayment mechanisms of distribution of the costs of medical care, but here and there, individuals and some groups have withheld coöperation or give only reluctant support. There can be little question that voluntary health insurance is our greatest bulwark against socialized medicine. Even the proponents of socialized medicine clearly recognize this. We must have the full and vigorous support of the entire profession in this program."

Anyone who is familiar with the problems confronting the physicians and laymen who are endeavoring to make Blue Shield plans work are aware that these statements are only too true.

This is the most critical period for these plans largely because of their rapid growth and experimental nature. Some have weathered severe economic storms, others will undoubtedly encounter them. But economic problems are not the only ones to be hurdled before it can be said that these plans have attained their maximum effectiveness. Most of them are still limited in their coverage to surgery and some medical care in the hospital. A few are endeavoring to protect their subscribers against the burdensome costs incurred in chronic illness. Of necessity all are moving forward con-

Continued on page 122)

Calendar of Medical Meetings

Date	*Society or Section*	*Program*	*Place and Time*
March 5	*Medical Society and Bar Association of D. C., Joint Meeting	Panel Discussion on Medico-legal Problems. Participants: Philip O. Pelland, M.D., *Moderator*, Mr. William T. Hannan, Dr. James A. Dusbabek, and The Honorable Richmond Keech, Associate Judge, U. S. District Court for D. C.	Medical Society Auditorium, 8:00 p.m.
March 10	*George Washington University School of Medicine	Kellogg Lecture: "Practical Aspects of the Physiological Problems of the Fetus and Newborn," James LeRoy Wilson, M.D., Professor of Pediatrics, University of Michigan	Hall A, School of Medicine, 1335 H Street, N.W., 8:30 p.m.
March 11	Section on Otolaryngology in joint meeting with Baltimore Section	Speaker: Paul H. Holinger, M.D., Professor of Laryngology and Broncho-Esophagology, University of Illinois School of Medicine	Baltimore
†March 12	*Washington Psychiatric	"Use of Psychiatric Teams in Civil Disaster," James S. Tyhurst, M.D., Dalhousie University, Halifax	Medical Society Auditorium, 8:30 p.m.
March 13	*George Washington University School of Medicine	Kellogg Lecture: "Therapy of the Climacteric," Francis Bayard Carter, M.D., Professor of Obstetrics and Gynecology, Duke University	Hall A, School of Medicine, 1335 H Street, N.W., 8:30 p.m.
March 17–19	*Aero Medical Association	23rd Annual Meeting	Hotel Statler
March 17	Osler	Paper: Philip J. Lowenthal, M.D. Case Report: H. A. Grennan, M.D.	Host: Dr. John A. Washington
March 18	Clinico-Pathological	Paper: Hugo V. Rizzoli, M.D.	Host: Dr. Crenshaw D. Briggs
March 22	Washington Gynecological	"History of Sterility," Barton W. Richwine, M.D.; "Induction of Labor," James L. Reycraft, M.D., Assistant Clinical Professor of Obstetrics and Gynecology, Western Reserve University School of Medicine	Willard Hotel, 6:30 p.m.
March 24	*Anesthesiologists	To be announced	Medical Society Auditorium, 8:00 p.m.
March 24	*George Washington University School of Medicine	Kellogg Lecture: "The Cardiac Patient as a Surgical Risk," Francis Clark Wood, M.D., Professor of Medicine, University of Penna.	Hall A, School of Medicine, 1335 H Street, N.W., 8:30 p.m.
March 24	Washington Medical and Surgical	"The Surgical Treatment of Cataract," James Spencer Dryden, M.D. Case Report: C. W. Camalier, Jr., M.D.	Hotel 2400, 6:30 p.m.
March 29	*Rheumatism	"Recent Advances in the Management of Gout; the Use of Benemid," Alexander Gutman, M.D., Professor of Medicine, College of Physicians and Surgeons, Columbia University	Medical Society Auditorium, 8:00 p.m.

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* Open meetings.
† Subject to change.

REPORT OF DELEGATES TO THE AMA CLINICAL SESSION*

PUBLIC RELATIONS

For two days before the opening of sessions of the House of Delegates, the AMA sponsored a series of talks and panel discussions in the field of public relations. The theme for this fourth annual medical public relations conference was "Joining Forces for Better PR," a theme intended to imply that physician, county society, state society and AMA must work strongly together in 1952. The prevailing tone of the sessions this year was less militant than last year. There seemed to be more inclination on the part of physicians to examine their own motives and actions critically, with a view to pleasing the public and providing better service.

In this same field of medical public relations, we were treated to talks by Senators Taft and Byrd in a crowded Shrine Auditorium and learned mainly that both of them are "agin" Truman because he favors a kind of creeping socialism and spends too much money. In other talks by AMA President John Cline and AMA Past President Elmer Henderson, we heard that the AMA campaign against socialized medicine is becoming less and less expensive. Henderson pointed out that during its first year the expense of the campaign was $1\frac{1}{2}$ million dollars. This rose to $2\frac{1}{2}$ millions in the second year, which was the peak. In this, our third year of the campaign, the cost will amount to $\frac{1}{2}$ million, and this cost is expected to drop to $\frac{1}{4}$ million for next year. The firm of Whitaker and Baxter is now being retained on a kind of half-time consulting basis. At the same time we were urged by Dr. Cline to remember our duty as citizens. He emphasized that our exercise of this duty in the political field next year may be of tremendous importance in determining the course of events in the United States. He also called attention to the fact that expenditures by the AMA in its fight against socialized medicine have represented but a small part of the 9-million-dollar annual budget, most of which is devoted to councils and other activities which are solely in the interest of providing the best possible medical care for the public.

Another annual feature of the House of Delegates is the selection of the General Practitioner of the Year. The man selected for the 1951 award was 84-year-old Albert C. Yoder of Goshen, Indiana. Dr. Yoder has been a general practitioner for 50 years and is still going strong in practice. A day or two later when he addressed the House of Delegates and accepted his award from President Cline, he seemed especially proud of his status as a general practitioner, although he confessed that there is a need for specialists too.

Vice President Oscar B. Hunter† served as official host to guests of the House of Delegates and introduced a number of outstanding men. One of them, Dr. Donald Wilson, Commander of the American Legion, spoke inspiringly of the challenge which arises from the respect of the public for medicine, of the need for our never being on the defensive politically, and of the warm support of the American Legion in the fight against socialization.

MEDICAL EDUCATION

For the second consecutive year an announcement was made of a contribution of $\frac{1}{2}$ million dollars by the AMA to the American Medical Education Foundation. Although important strides have been made during 1951 for the mobilization of private funds in behalf of our medical schools, the record of contributions by individual physicians has been anything but good. Only 1,361 individual physicians contributed during the past year. This may have been due in part to misunderstandings about the method of utilizing the fund. It is now understood that the cost of collection and disbursement of the money is underwritten entirely by the AMA so that all money contributed goes intact to the medical schools. At the start the money which is contributed to the Foundation is placed in one of two categories: (1) general fund, or (2) funds designated for particular schools. The latter category provides that an alumnus who wishes his contribution to go to his alma mater may specify this and has the assurance that the entire sum will be used as he has specified. Nor does this reduce the amount of money which his alma mater will receive from the general fund, which consists of all unspecified donations. For 1951 the general fund was divided equally among all schools in the United States. It is hoped that when the general fund reaches a sufficient size, other types of

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* The Fifth Clinical Session of the American Medical Association was held in Los Angeles, Calif., December 4-7, 1951.

† Died December 19, 1951.

MEETING OF COMMITTEE ON BLOOD BANKS

Pictured above are members of the AMA's Committee on Blood Banks who met on Sunday morning, December 2, to discuss some of the issues which confronted the Committee. Left to right are: Dr. James Reuling, Bayside, N. Y.; Dr. Deering Smith, Nashua, N. H.; Dr. J. O. Graves, Monroe, La.; Dr. James Stevenson, Tulsa, Okla.; Dr. John Green, Vallejo, Calif.; Dr. Frank G. Dickinson, Director of AMA's Bureau of Medical Economic Research, Chicago, Ill.; Dr. Frank E. Wilson, Deputy Director of AMA's Washington Office; Dr. Herbert P. Ramsey, the District Medical Society's senior delegate to the AMA and Chairman of the Committee; and Dr. L. W. Larson, Bismarck, N. D., AMA Trustee.

contributions to the schools can be made, (1) on a per capita basis, and (2) on the basis of demonstrated special need. The House of Delegates was urged to stimulate a more active interest in county and state societies in the American Medical Education Foundation and to work with medical school alumni societies in the same direction. Physicians generally were instructed to notify the Foundation of contributions which they may make directly to medical schools in order that the Foundation may appraise the total contribution of United States physicians to medical education. In somewhat the same connection the announcement was made that a survey will be made by the Board of Trustees of the AMA of the total problem of funds for medical research.

A revised form of the "Essentials of an Acceptable Medical School" was presented by the Council on Medical Education and Hospitals, and was approved by the House. It is noteworthy that this revised "Essentials" accentuates the need for integration of the various components of the curriculum, and the importance of clinical bedside teaching as opposed to didactic lectures.

The growth of the Student AMA was described, and a brochure of its benefits and objectives was distributed. All of the delegates were urged to promote further growth of this new association; the delegates from the Medical Society of the District of Columbia received a special appeal from the Council on Medical Education and Hospitals because the schools in this locale have not yet signified their intention of joining the association.

Hospitals

The Commission for Creditation of Hospitals is now an established fact. It is composed of six representatives of the American Hospital Association, three representatives of the American College of Surgeons, three representatives of the American College of Physicians, and six representatives of the American Medical Association. The AMA appointees to this Commission are Drs. Gundersen, Truman, Murray, Weiskotten, Whitacre, and Price. The exact method of function of the Commission remains to be worked out. However, it is apparent that a large part of its financial support will come from AMA funds. And it is understood that representatives of the American Hospital Association will be concerned more intimately with factors of hospital administration, while the medical men on the commission will be concerned with the quality of medical service in the hospital.

A report from the Board of Trustees on the relation of physicians and hospitals was issued to replace prior reports, including the Hess report. The Board report was approved by the House of Delegates. It upholds the stand of previous reports that a physician should not dispose of his professional attainments or services to any hospital or institution under conditions whereby such services are resold. It holds physicians alone accountable for violations of this code and contains no threat of punitive action against a transgressing hospital.

Also in the hospital field a resolution was passed regarding the desirability of approving internships on the basis of the training facilities available, and the increase in the number of general practice residencies now available was commended.

Public Health

In this field there were several outstanding items. First was the report of the Committee on Blood Banks, which is among the important reports given at sessions of the House. The report at this session was delivered by Dr. Ramsey and emphasized the need for publicizing the contraindications as well as the indications for the use of blood and blood derivatives, urged better coöperation on the part of physicians in the matter of insuring that blood bank reserves are replenished, advocated the issuance of blood type cards to donors, and strongly advised the integration of all available blood bank facilities into the national program.

The House also went on record as approving fluoridation of water for the prevention of dental caries and gave its support to a campaign for warning the public about common household products which contain poisonous ingredients and are nevertheless not labeled as poisons. With regard to such poisons, it was announced that they will be brought to the attention of the public in *Today's Health.*

A resolution was passed approving the idea of having the Government purchase voluntary health insurance for the needy dependents of men in military service, through Blue Shield and medical society-sponsored plans.

A number of items connected with veterans care were discussed, and all ramifications of this problem were referred to a special committee of the Board of Trustees for further report. No statement of policy was made on the matter of the care of veterans with nonservice-connected disabilities in Veterans Administration hospitals.

Internal Affairs

A report was made by a special committee which had surveyed the organizational structure of standing committees of the House of Delegates. The idea was approved that standing committees and councils of the House of Delegates are answerable to the Board of Trustees, which in turn is answerable to the House of Delegates. The committee commended the idea of a limited term of office for members of standing committees and councils.

Miscellaneous items included approval of a substantial honorarium for the president of the AMA; spade work for the passage of amendments in the coming June meeting for the purpose of establishing a single class of membership; announcement of the intention to enlarge the Washington Office and to purchase permanent quarters for this Office when feasible; protest against any Government policy of deferment of chiropractic students from military service; and a formal announcement that the next (1952) Clinical Session will be held next December in Denver.

Herbert P. Ramsey, M.D.
Hugh H. Hussey, M.D.
Delegates

INCREASED RATES FOR BLUE CROSS-BLUE SHIELD PLANS

New rates which become effective, March 1, for participants in Group Hospitalization and Medical Service reflect the rising medical costs. Some benefits have been added.

Individual contracts for Hospital service will be $1.70 a month (an increase of 40 cents); family contracts, $3.70 per month (an increase of 70 cents); individual contracts for Surgical service, $1.00 per month (no increase); family contract, $3.20 (an increase of 50 cents).

Increase in Hospital Benefits

When a subscriber is admitted to a participating hospital, 21 days of hospital care will be provided with full service benefits in semi-private accommodations, plus 180 additional days with an allowance of $5 a day, or a total of 201 benefit days for each confinement. Benefit days will be fully renewed 90 days after discharge from the hospital but readmission to the hospital within 90 days shall be considered one confinement.

For the first time, a subscriber may procure full service benefits when hospitalized away from the Washington area, provided he is admitted to one of 4,500 hospitals over the Nation that participate in the Blue Cross program. If hospitalized in a nonparticipating hospital, the subscriber will get increased allowance ranging from $21 for the first day of hospital care to $274 for 21 days.

An allowance up to $10 is provided for outpatient service when the subscriber is not a bed patient for (1) emergency first aid within two hours after an accident, or (2) use of operating room facilities when a general anesthetic is used.

When the participant is accepted for treatment by a general hospital, up to 10 days' care will be provided for pulmonary tuberculosis and mental or nervous disorders during any 12 consecutive months.

Change in Maternity Benefits

The revised Family contract will offer an allowance of up to $9 a day for a maximum of 8 days of hospital care for any one pregnancy, these revised benefits to become effective October 1, 1952. Full hospital service benefits will be provided for cesarean deliveries, termination of ectopic pregnancies, and miscarriages.

Increase in Surgical Benefits

For the first time subscribers to the Surgical Service Plan will receive benefits for the following currently specified services rendered in the home or in the doctor's office: emergency treatment of fractures and dislocations; superficial tumors and cysts; external thrombosed hemorrhoids; suturing lacerations (up to $15); nasal polyp removal; chalazion removal; probing tear duct (initial); and circumcision.

The income levels have also been increased. The benefits offered by the Surgical contract will cover in full the physician's charge for services for a single participant if his income does not exceed $3,000 and for a family participant if the income does not exceed $5,500.

DR. HEATH APPOINTED ASSISTANT DIRECTOR OF PUBLIC HEALTH

The appointment of Dr. Frederick C. Heath, M.D., M.P.H., as Assistant Director of Public Health, D. C. Health Department, was announced January 10, 1952, by Dr. Daniel L. Seckinger, Director of Public Health. The position has been filled temporarily by Dr. Arthur E. Cliff since August, 1950. Dr. Seckinger stated: "Dr. Heath will give to the Department material assistance in its increasing scope of activities and responsibilities. His appointment will help the Director of Public Health to more adequately coordinate the preventive phases of our activities with the medical care responsibilities and other major health problems, including civil defense."

A native of Cecil County, Maryland, Dr. Heath graduated from Hahnemann College of Science, pre-medical, in 1925. His medical degree was received at Hahnemann Medical School, Philadelphia, in 1929, following which he interned at the Community General Hospital in Reading, Pennsylvania. While engaged in general practice, Dr. Heath became associated with public health as physician to several industrial plants in Berks County, Pennsylvania, until August, 1942.

Entering the Army as a Captain, Dr. Heath served as Battalion Surgeon and Assistant Command Surgeon, Engineers Command, in the Mediterranean Theatre of Operations until late in 1945.

From December 1, 1945 to December 1, 1950 he was health officer for the Giles, Montgomery, and Radford districts in Virgina. He is resigning his present position as Health Officer of Fairfax County, Virginia, which he has held since December, 1950, to accept this new assignment. While at Fairfax he was responsible for developing a program relating to the health in the subdivision developments in that county, and its sewage and water facilities. The health budget was doubled in the year he served there and the sanitation personnel increased 90 per cent; nursing services, 40 per cent. He was instrumental in revising the school health program to bring it up to present standards set by large cities. Two health centers were established in the county during his régime, one at Penn-Daw and one at Falls Church.

Concerning Those Who Work with Us

DENTISTRY

THE EDUCATION OF A DENTIST*

GERARD J. CASEY, D.D.S.

Assistant Secretary, Council on Dental Education, American Dental Association

The grass roots of an education of a dentist are founded in the thousands of secondary schools throughout the country, and are further nourished in the hundreds and hundreds of cultural campuses of the many junior colleges, colleges and universities that function from coast to coast.

Thousands and thousands of students find their first inklings of interest in a dental professional career while in high school. The student who finds his interest centering upon the dental profession cannot begin too early to plan the educational process. It is evident that a four-year high school course must be completed in order to gain admission to a liberal arts college. The student even at this point should write to the registrar of the college or university he intends to enter so that he or she may plan and complete the necessary high school courses necessary for entrance to college. The student should also write to the dental school or schools in which he is interested and obtain from them the catalogues that give all the necessary information for admission to dental school, since several of the dental schools require certain courses to be pursued in the high school course. However, most of the schools do not directly specify high school requirements in their catalogues, but clearly assume that the student must satisfy the requirements for admission to the liberal arts college in which he proposes to prepare for dental study.

PREDENTAL REQUIREMENTS

The minimum requirement of two academic years of liberal arts study, prescribed by the Council on Dental Education, is observed by all the dental schools. There is no short-cut in the path to a dental career. The college requirement covers at least 60 semester hours or one half the requirements for the bachelor's degree. It is possible, therefore, for a student in an accredited junior college to complete the requirements for admission to dental school. However, the student offering only two years of predental work must have taken in the college course one year of English, biology, physics and inorganic chemistry. A one-half year course in organic chemistry is necessary. All of these courses must show at least minimum passing credit. Therefore, it is important that the student knows in advance the courses required and that he sees to it that his curriculum contains the courses mentioned, so that upon presentation of his credits to the dental school admission office they will be given consideration.

Sometimes students desire to study dentistry after they have completed three years of college work or have even graduated from college but find that they have no credit in biology or physics. The Council on Dental Education of the American Dental Association permits deviations from the prescribed requirements in biology and physics but not in any case in English and chemistry. Formal credit in biology and/or physics, but not in English or chemistry, may be waived in the case of superior students (a "B+" average or better) with three or more years of college credit earned in an accredited college. About half of the dental schools observe this permissive regulation.

The requirements here outlined are prescribed on a minimum basis. Several schools exact higher requirements. Some schools now require three years of liberal arts work for admission and some others extend the subject requirements. It is, therefore, important for the student as soon as he decides upon a career in dentistry to make sure that his liberal arts course is satisfactory. Students should also recognize the fact that many applicants to dental study offer more than the minimum requirements.

The daily lifework of the dentist is restricted to a relatively narrow field of human interest and experience. Therefore, in the preliminary studies in high school and college the student would do well to broaden his general education as widely as possible. The studies in a dental school are of necessity highly technical and highly specialized. It is in high school and college that the student must lay the groundwork for such future interest and satisfaction as he may desire from formal basic education in language and literature, history, government, mathematics, economics, psychology, sociology, and the arts. It is generally regarded as unwise for a prospective dental student to overload his predental program with the sciences which are preliminary to dental study. The minimum science requirement should be met with thoroughness and fidelity with a choice of electives which will enrich his cultural background. His predental education, if wisely planned and followed, will go far toward enabling the student to make satisfying use of his leisure time.

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* EDITOR'S NOTE: This is the first of a series of articles designed to acquaint physicians with the activities and problems of those in the ancillary branches of medicine.

By an accredited liberal arts college the Council on Dental Education of the American Dental Association means an institution approved by the Association of American Universities or by one of the regional accrediting agencies.

The admission of a student to a dental school from a liberal arts college not within the territory or jurisdiction of an accrediting body may be sanctioned by the Council in extraordinary or special cases after ample evidence has been furnished concerning the quality and character of the instruction of the institution in question. A limited number of students may also be admitted from unaccredited institutions provided the credits earned are acceptable toward its degree by the state university of the state in which the unaccredited colleges are located. The student should have no doubt about the acceptability of the liberal arts college in which he is enrolled. Advice from the dental school should be sought concerning this matter.

THE DENTAL APTITUDE TESTING PROGRAM

Up to this point we have been concerned with the student as he went about his high school and college courses. Thousands of students submit applications to the offices of admissions of the dental schools throughout the land. And the foremost question in the mind of all concerned is, "Who should enter dental school?" "In order to enter any of the accredited professional schools the applicant must give evidence to the admission officials that he or she will probably be a credit to that institution. Not all professions demand the same kind of evidence, and not even all schools in a given profession have the same requirements and hold to the same standards of proficiency.

"All dental schools subscribe to the same basic requirements by insisting on a minimum of two years of acceptable college work which includes certain specific courses; but this is not the only entrance requirement. The additional requirements are not the same for all schools, but, in most instances, they include a careful evaluation of the applicant's academic record of both high school and college, a study of his letter of recommendation and a personal interview if it is at all practicable.

"Many of the dental schools study their applicants' qualifications still more carefully and utilize various means in an effort to predict which of their applicants are most likely to succeed in their school and later in the profession of dentistry."

The Council on Dental Education of the American Dental Association, with the American Association of Dental Schools, has interested itself in the subject of predicting dental student success. The Committee on Dental Aptitude Testing, composed of representatives of both these and under the direction of Shailer Peterson, Ph.D., Secretary of the Council on Dental Education, inaugurated a mental and manual aptitude testing program calculated to help answer the often perplexing question as to who should study dentistry. The first phase of this program was an experimental program in aptitude testing which was begun in 1946 and has as its objectives:

1. To measure the student's ability to read with understanding the type of material that he will be expected to read in dental school.
2. To measure the student's ability to memorize verbal and visual material.
3. To measure the student's knowledge of word meanings, both general and scientific vocabulary.
4. To measure the student's mental ability and to secure measurement on his ability to reason, as well as part scores on his linguistic and quantitative abilities.
5. To measure the student's ability to visualize patterns and relations without the necessity of pre-

paring drawing of all these relations. Associated with this is the objective to measure the student's appreciation of artistic design.

6. To measure the student's ability to express himself orally and in writing.

7. To measure the student's ability to use his hands and fingers skillfully and dexterously.

This experimental program proved so successful that all of the dental schools elected to require all their applicants to take the aptitude tests prior to admission. The first Nation-wide dental aptitude testing program for applicants to the dental schools was inaugurated the latter part of 1950 for the applicants for the 1951 class. A brochure on the dental aptitude testing program may be had by writing to the American Dental Association, Division of Aptitude Testing, 222 East Superior Street, Chicago 11, Illinois.

It should, therefore, be of great interest to prospective students of dentistry to know that the success of dental students in their basic science courses can be predicted with considerable accuracy by such things as (1) general intelligence, (2) reading ability in the sciences, and (3) ability to apply scientific principles. Achievement in the clinical and preclinical subjects can be predicted by abilities demonstrated in (1) visualization of three dimensional patterns, and (2) manual operations such as carving.

The next question to arise is, when do the students participate in this dental aptitude test. Usually the student takes the aptitude test during his second year of college predental studies because he or she will, by the following June, have finished the minimum requirements for entrance into a dental school, and thus will be eligible for the first time for consideration by the dental school to become a dental student.

The search today in the academic world is for the man behind the credentials. The outlook is hopefully for more and more emphasis upon the human equation at the entrance of our professional schools with no lessening of the requirement of a negotiable documentary record. Our professional schools are everywhere alert to the new movements in all phases of education on the university level. Thus, today with all these instruments of evaluation it is hoped that the admission committees of the dental schools will be able in their consideration of applicants to more and more find the man behind the credentials.

THE PROFESSIONAL COURSE OF STUDY

After the student has completed the predental requirements and has gained admission to a dental school, he must expect to spend four academic years in dental study. Fortunately for the profession there is no substandard dental school in the United States. All schools observe the minimum predental and professional requirements prescribed by the Council on Dental Education.

Most of the schools confer the degree of Doctor of Dental Surgery (D.D.S.) upon candidates who complete the professional course, and four schools confer the degree of Doctor of Dental Medicine (D.M.D.). The dental profession and state dental licensing boards recognize no distinction in inherent values as between these two degrees. In the majority of the universities in which dental schools form an integral part, it is possible for the individual student in combined courses to earn the degree of Bachelor of Arts (A.B.) or the degree of Bachelor of Science (B.S.) and the professional degree of D.D.S. or D.M.D. in six or seven years. It is also possible in some instances for the individual student to earn the degree of Bachelor of Science in Dentistry (B.S. in D.) in connection with the professional course by offering credit in certain specified subjects in liberal arts and science.

MEDICAL AND HOSPITAL RELATIONSHIPS

The majority of the dental schools depend in whole or in part upon their associated medical schools for the teaching of the basic science subjects. Medical and dental students are taught these subjects together in only a few schools, and the first two years of the dental course are identical with the medical course in only one institution. Integration between medical and dental schools in the field of the sciences has not reached the point where transfer of credit is readily possible. If the student is interested in securing degrees in both medicine and dentistry, he would do well to ascertain from the university he proposes to enter the possibility of shortening the usual time to secure the two degrees. While believing that the dental teaching program in the basic sciences should make use of all the facilities the university possesses in this field, the Council urges that in the conduct of the entire dental curriculum administrative autonomy should be maintained.

HOSPITAL DENTAL INTERNSHIPS AND RESIDENCIES

Marked interest has been shown in recent years in improvements in the general health service of many hospitals by the establishment of dental internships and residencies. A growing number of dental graduates seek one or more years of hospital experience before beginning dental practice on their own account or engaging in teaching or research. Delaware is the only state which specifies by statute the requirement of a year's internship before a dental graduate may be admitted to the licensing examination. Both the American Dental Association and the American Hospital Association have taken steps to promote and strengthen hospital dental internships and residencies.

In 1943 the Council on Dental Education appointed a special committee to formulate requirements for the approval of hospital dental internships and residencies, and in 1944 the House of Delegates of the American Dental Association authorized the appointment of a Committee on Hospital Dental Service. As of February 26, 1946 the Council adopted requirements for the approval of hospital dental internships and residencies. The Council has an approved list of hospitals and sanatoriums for the training of dental interns and residents. This list may be obtained upon request. Additional hospitals will be added to the list as the Council proceeds with its inspections.

After the student has satisfied the dental faculty as to his requirements in the dental curriculum he is recommended to the university, and the dental degree (D.D.S. or D.M.D.) is conferred upon him.

He now stands on another threshold. He is ready to begin his professional career and his service to his community. In order to accomplish this he must first apply to the state dental board of whatever state he intends to practice and take the qualifying examination and pass it. He then receives his license to practice. And thus he serves. But he has not left his student days behind. Each day in practice brings a new problem for which a solution must be brought forth. And thus the practitioner again becomes a student, sometimes in his home with a textbook, sometimes by taking a refresher course at the dental school or one given by the dental society study club, and sometimes by attending clinics and seeing the actual demonstration of the point in question. The education of a professional man is never ended. It is always beginning.

FACTS ABOUT AMA DUES FOR 1952

1. American Medical Association membership dues for 1952 are $25.00.

2. Fellowship dues for 1952 have been abolished.

3. AMA membership dues are levied on "active" members of the Association. A member of a constituent association who holds the degree of Doctor of Medicine or Bachelor of Medicine and is entitled to exercise the rights of active membership in his constituent association, including the right to vote and hold office as determined by his constituent association, and has paid his AMA dues, subject to the provisions of the By-laws, is an "active" member of the Association.

4. AMA membership dues are payable through the component county medical society or the constituent state or territorial medical association, depending on the method adopted locally.

5. Commissioned medical officers of the United States Army, the United States Navy, the United States Air Force, or the United States Public Health Service, who have been nominated by the Surgeons General of the respective services, and the permanent medical officers of the Veterans Administration and the Indian Service, who have been nominated by their Chief Medical Directors, may become Service Fellows on approval of the Judicial Council. Service Fellows need not be members of the component county or constituent state or territorial associations or the American Medical Association. They do not receive any publication of the AMA except by personal subscription. If a local medical society regulation permits, a Service Fellow may elect to become an active member of a component and constituent association and the American Medical Association, in which case he would pay the same membership dues as any other active member and receive a subscription to *The Journal of the American Medical Association.*

6. An active member of the American Medical Association may be excused from the payment of

AMA membership dues when it is deemed advisable by the Board of Trustees, provided that he is partially or wholly excused from the payment of dues by his component society and constituent association.

The following may be excused in accordance with this provision: (a) members for whom the payment of dues would constitute a financial hardship as determined by their local medical societies; (b) members in actual training but not more than five years after graduation from medical school; (c) members who have retired from active practice; (d) members who have reached the age of 70, on request, and starting January 1 following the 70th birthday, and (e) members who are called to active duty with the armed forces (exemption begins July 1 or January 1 following entrance on active duty). The last two categories are excused from AMA dues regardless of local dues exemptions.

7. Active members of the American Medical Association are not excused from the payment of AMA membership dues by virtue of their classification by their local societies as "honorary" members or because they are excused from the payment of local and state dues. Active members may be excused from the payment of AMA membership dues only under the provision described in paragraph 6 above.

8. AMA membership dues include subscription to *The Journal of the American Medical Association.* Active members of the Association who are excused from the payment of dues will not receive *The Journal* except by personal subscription at the regular subscription rate of $15.00 a year.

9. Members may substitute one of the special journals published by the Association for *The Journal* to which they are entitled as members.

10. A member of the AMA who joins the Association on or after July 1 will pay membership dues for that year of $12.50 instead of the full $25.00 membership dues.

11. An active member is delinquent if his dues are not paid by June 1 of the year for which dues are prescribed and shall forfeit his active membership in the AMA if he fails to pay the delinquent dues within 30 days after the notice of his delinquency has been mailed by the Secretary of the AMA to his last known address.

12. Members of the AMA who have been dropped from the Membership Roll for nonpayment of annual dues cannot be reinstated until such indebtedness has been discharged.

13. The apportionment of delegates from each constituent association shall be one delegate for each thousand (1,000), or fraction thereof, *active members of the American Medical Association* as recorded in the office of the Secretary of the American Medical Association on December 1 of each year.

CORRESPONDENCE

Washington, D. C., December 18, 1951

To the Editor:

In connection with licensure status of interns, resident and assistant resident physicians in local hospitals (except those governed by Section 42 of the Healing Arts Practice Act), the Commission on Licensure at a Special Meeting held December 17, 1951 took the following action:

"Upon motion duly made, seconded, and unanimously passed by the Commission on Licensure, Healing Arts Practice Act, it is resolved that interns, assistant residents and resident physicians on the house staffs of all local hospitals, except those governed by Section 42 of the Act to Regulate the Practice of the Healing Art to Protect the Public Health in the District of Columbia (Public Law 831—70th Congress), are not persons engaged in or practicing the healing art in the District of Columbia as referred to in Section 3 of said Act.

"Pursuant to the foregoing and to enable the Commission to properly administer the Act of Congress above mentioned, all hospitals within the District of Columbia having under their jurisdictions or in their employ any such interns, assistant residents and resident physicians are hereby required to furnish the Commission in writing the name of each intern, assistant resident and resident; the nature of the course he is pursuing or intends to pursue; the duration thereof as required by the Specialty Board or Licensure Board under which this training is being pursued and to further notify the Commission upon the termination of such period.

"If for any reason it is desired to extend the period of training beyond that required by the Specialty Board or Licensure Board, proper application for determination shall be made to the Commission prior to the expiration of the period of training referred to above."

Very truly yours,

Daniel L. Seckinger, M.D., Dr. P.H.
Secretary-Treasurer, Commission on Licensure, District of Columbia

News and Personals

The 1952 Scientific Assembly of the American Academy of General Practice will be held in Atlantic City, N. J., March 24–27. The Congress of Delegates will assemble earlier for pre-Assembly meetings.

The Fifth American Congress on Obstetrics and Gynecology will convene in Cincinnati, Ohio, March 31 through April 4, 1952, at the Netherland Plaza Hotel. The Congress will feature a comprehensive five-day scientific program covering the medical, nursing and public health aspects of the maternal care team. Registration fees are $5 for members and $10 for nonmembers. Further information may be secured by writing to Dr. Donald F. Richardson, Executive Secretary of the sponsoring organization, the American Committee on Maternal Welfare, 116 South Michigan Avenue, Chicago 3, Illinois.

The Second National Cancer Conference will be held at the Netherland Plaza Hotel in Cincinnati, Ohio, March 3–5, 1952. This Conference is sponsored jointly by the American Cancer Society, the National Cancer Institute of PHS, and the American Association for Cancer Research. A series of panel presentations and discussions will cover the clinical aspects of cancer and the progress of present-day research. The program lists speakers of prominence from all over the United States together with a sprinkling of foreign names. Included in the list are Dr. Charles F. Geschickter, Washington, and Drs. Roy Hertz and Thelma B. Dunn, of Bethesda, Md. Dr. Geschickter will participate in a Panel on Cancer of the Breast; Dr. Hertz will discuss steroid therapy in the same panel; and Dr. Dunn will speak on the etiology of cancer in a Panel on Lymphoma and Leukemia. Dr. Hertz will also discuss a paper on the "Role of Steroids in Cervical Cancer" by Dr. William U. Gardner of New Haven, Conn.

Six regional meetings of the United States Chapter of the International College of Surgeons have been scheduled for the early months of 1952. They are:

February 15–16	Birmingham, Alabama; Tutwiler Hotel
March 13–14	Pittsburgh, Penna.; William Penn Hotel
March 28	Tulsa, Okla.; Mayo Hotel
April 24–25	Detroit, Mich.; Hotel Statler
April 27–29	Kansas City, Mo.; President Hotel
May 2–3	Colorado Springs, Colo.; Broadmoor Hotel

Surgical papers will be presented and panel discussions led by outstanding speakers, all nationally known in their respective fields, at each of the regional meetings.

The American College of Physicians announces its series of postgraduate courses for the spring of 1952. They are scheduled to be held in widely separated cities, but many of them will be accessible to Washington physicians. A list of the courses follows:

No. 1. Gastroenterology, February 25–29, Stanford University School of Medicine and University of California Medical School, San Francisco. Dwight L. Wilbur, M.D., and Theodore L. Althausen, M.D., Co-Directors.

No. 2. Current Concepts of Allergy and Associated Disorders, March 3–7, Washington University School of Medicine, St. Louis. Harry L. Alexander, M.D., Director.

No. 3. Diseases of the Blood Vessels; Diagnosis and Modern Treatment, March 10–15, Cornell University Medical College and The New York Hospital, New York. Irving S. Wright, M.D., Director.

No. 4. Clinical Medicine from the Hematologic Viewpoint, March 17–22, Ohio State University College of Medicine, Columbus. Charles A. Doan, M.D., Director.

No. 5. Internal Medicine, April 14–18, University of Michigan Medical School, Ann Arbor. Cyrus S. Sturgis, M.D., Director.

No. 6. Electrocardiography: Basic Principles and Interpretation, May 12–17, Massachusetts General Hospital, Boston. Conger Williams, M.D., Director.

No. 7. Trends and Newer Developments in Internal Medicine, May 12–16, Hahnemann Medical College of Hospital of Philadelphia, Philadelphia. Charles L. Brown, M.D., Director.

No. 8. Physiological Basis for Internal Medicine, June 2–7, University of Toronto Faculty of Medicine, Toronto. Ray F. Farquharson, M.D., Director.

For each course the fees per week to members of the College are $30 and to nonmembers, $60, with the exception of Course No. 6, for which the fees are $60 to members and $120 to nonmembers.

All registrations must be made through the Executive Offices of the College, E. R. Loveland, Executive Secretary, 4200 Pine Street, Philadelphia 4, Penna.

The Fifth Annual Postgraduate Course in Diseases of the Chest, sponsored by the Council on Postgraduate Medical Education and the Pennsylvania Chapter of the American College of Chest Physicians and the Laennec Society of Philadelphia, will be presented at the Warwick Hotel, Philadelphia, March 24–28. Physicians interested in attending the postgraduate course are invited to communicate with the Executive Offices of the College, 112 East Chestnut Street, Chicago 11, Ill.

George Washington University School of Medicine announces that its 1952 Postgraduate Program will begin on February 25 and extend through March 28. As in the past, the courses will be full-time and intensive, with instruction from 9 a.m. to 5 p.m. each day, Monday through Friday. Tuition is $75.00 per week. Three courses are offered:

Surgery, February 25–29
Obstetrics and Gynecology, March 10–14
General Medicine, March 24–28

All sessions will be held in the Conference Room of the University Hospital. Inquiries should be addressed to Dr. Thomas M. Peery, Director of Postgraduate Instruction, 901 23rd Street, N.W., Washington 7, D. C.

The Kellogg Lectures, sponsored by George Washington University, will be held during the weeks of postgraduate instruction. These meetings will convene in Hall A of the School of Medicine, 1335 H Street, N.W., at 8:30 p.m. and are open to the medical profession. The first Lecture is scheduled for February 28. The name of the speaker and the subject he will discuss together with succeeding Lecture topics are listed in the CALENDAR OF MEDICAL MEETINGS appearing in this issue of the ANNALS.

The District of Columbia Dental Society extends a cordial invitation to members of the Medical Society of the District of Columbia to attend the 20th Annual Postgraduate Clinic at the Shoreham Hotel, March 9 to 12.

Members of the **George Washington University Medical Society** are urged to attend the Society's 26th Annual Banquet and Alumni Reunion at the Mayflower Hotel, February 16, at 7 p.m. Football Coach "Bo" Rowland, as he is affectionately known, will be the principal speaker. Dr. Richard H. Fischer is in charge of banquet reservations.

The Board of Directors of the Washington Home for Foundlings announces that it is now authorized to place babies for adoption. Physicians are cordially invited to make inquiries of Miss Evelyn Hibbard, Director of the Home, Woodley 6367, and to make a personal visit to the Home, which is located at 4510 42nd Street, N.W.

The Washington Home for Foundlings, incorporated by an Act of Congress in 1870, has long been distinguished for the care of foundlings and babies of unwed mothers of all creeds. It has ample facilities for the care of newborn infants. The emotional as well as the physical needs of the infants are met by individualized care. Medical and psychological studies are part of the routine care.

Members of the Medical Society serving on the Board of the Home are: Drs. William S. Anderson, who is also Medical Director, and Drs. Lewis C. Ecker, Clarence K. Fraser, Harry H. Kerr, and Calvin T. Klopp. Consultants to the Medical Director are Drs. Robert E. Moran, William J. Tobin and Wendell M. Willett.

The Board feels strongly that direct placement of infants is not in the best interests of either the child or the parents. There are multiple problems which arise in connection with placing babies for adoption which only authorized child placement agencies are in a position to solve. The Board hopes that physicians will acquaint themselves with some of these problems through visits to the Home or by calling Miss Hibbard.

Officials of **Providence Hospital** are announcing plans for financing a new 350-bed hospital. A public campaign for a million dollar subscription drive was launched early this month. Mr. John A. Reilly, President of the Second National Bank and President of the Hospital Advisory Board, is directing the campaign.

The new hospital, to cost approximately $7,000,000, will be built on a 15-acre tract at 12th and Varnum Streets, N.E., near Catholic University. It is expected that half the cost of the institution will be met by Federal funds. More than $2,500,000 will be raised from outside sources by the Sisters of Charity, Emmitsburg (Md.) Province, who organized Providence Hospital nearly a century ago.

No announcement has been made concerning the disposition of the property at 2nd and D Streets, present site of Providence.

The 1951 building fund drive of **Children's Hospital** exceeded its goal of $545,000 by $2,688. The original sum of $2,500,000 which had been raised for the new building proved inadequate because of the increased cost of labor and building material, and a supplementary drive for funds was necessary. Present plans call for occupancy of the new building by September, 1952.

The first issue of the *Journal of the Student American Medical Association*, which made its appearance in the Medical Society's offices on January 17, reflects the enthusiasm of its youthful staff. It is a creditable journal with attractive cover and format. This first issue contains three scientific articles, one by a guest author, Dr. Robert M. Janes, Head of the Department of Surgery of the University of Toronto, and the two others by medical students.

It is interesting to note that socio-economic problems will occupy a considerable portion of the journal, five articles coming under this classification. Dr. Austin Smith, Editor of the *Journal of the AMA*, has written the guest editorial.

Members of the editorial staff, Russell F. Staudacher, Executive Editor, Walter H. Kemp, Managing Editor, Philip F. Corso, Student Editor, and Thomas R. Gardiner, Advertising Director, are to be congratulated on this new addition to the field of semi-scientific publications. The editorial offices of the *Journal of the Student AMA* are located at 535 North Dearborn Street, Chicago 10, Illinois.

The Executive Board of the Medical Society of the District of Columbia at its regular meeting, December 17, approved the recommendation of the Committee on Public Health and the Subcommittee on Child Welfare for fluoridation of the city's water supply.

New officers of the **Prince Georges County Medical Society** are as follows:

Dr. Samuel J. N. Sugar, *President;* Dr. John M. Warren, *Vice President;* Dr. Benjamin S. Miller, *Corresponding Secretary;* Dr. Julius Kauffman, *Recording Secretary;* Dr. William B. Hagan, *Treasurer.*

Members of the **Washington, D. C. Section of the American Congress of Physical Medicine** inspected the Physical Therapy Clinic of Walter Reed Army Hospital, January 9, at the invitation of Lt. Colonel J. H. Kuitert, M.C., Chief of the Physical Medicine Service. Following the breakfast meeting and inspection of the Clinic a motion picture on "Rheumatoid Arthritis of the Spine" was shown.

The Research Foundation of Doctors Hospital has received a donation in memory of the late **Dr. Leon S. Gordon** from the physician's mother, Mrs. Freda Gordon, and two brothers, Drs. Everett J. and David S. Gordon. The gift will make it possible for the Foundation to award an annual prize to one of its outstanding resident physicians. The donation was presented by Dr. Leon Gordon's daughter, Susan, 11 years of age, who was born in Doctors Hospital on Christmas Day in 1940, the first year of the Hospital's operation. Dr. Charles Stanley White, President of the institution, accepted the gift.

Dr. Russell J. Fields addressed the **Medical Arts Society,** February 14, at the Kennedy Warren. His subject was "What's New in Dermatology."

The Section on General Practice met in the Medical Society's Library, January 22. The principal speaker was Dr. Hugh H. Hussey, Editor of G. P. and Associate Professor of Medicine, Georgetown University School of Medicine, who spoke on "Medical Reading and Writing."

The Section on Neurology and Psychiatry elected new officers, January 3. They are:

Dr. J. Peter Murphy, *Chairman;* Dr. Leon Salzman, *Vice Chairman;* Dr. Harvey H. Ammerman, *Secretary-Treasurer.*

The Women's Medical Society held a joint meeting with the D. C. Women's Bar Association on February 5 in the Medical Society's auditorium. Judge Nadine Lane Gallagher addressed the joint meeting on "The Responsibilities of the Professional Women."

Dr. John Minor was host to the **Clinico-Pathological Society,** January 15. Dr. Worth B. Daniels presented a paper on "The Diagnosis and Management of Pyogenic Meningitis."

The District of Columbia Commissioners, under an order issued, December 27, authorized the assignment of chest surgeons from **Walter Reed Army Hospital** to periodic surgical duty at **Glenn Dale Sanatorium.** This new procedure will furnish Walter Reed Hospital, which has an excellent chest surgery service, with a sufficient number of tuberculosis cases to get it approved for a residency training program. The Army will supply its own anesthetists.

Washington Post Photo

DR. OVERHOLSER HONORED BY FRENCH GOVERNMENT

DR. WINFRED OVERHOLSER, Superintendent of St. Elizabeths Hospital, receives medal of the French Legion of Honor from DR. YVES PORC'HER (right). The French Government was represented at the ceremonies by its Consul in Washington, PIERRE DUPONT.

Dr. John P. McGovern, Chief of the Outpatient Department at Children's Hospital, and Assistant Professor of Pediatrics at George Washington University School of Medicine, was elected a Vice President of the **Walter Reed Society,** a new organization which was founded in Los Angeles early in December at the close of the meetings of the AMA.

The Society, which is sponsored by the National Society for Medical Research, is comprised of those who have served as "human guinea pigs" in medical research or experimentation under the direction of a qualified scientist. It is named in honor of Dr. Walter Reed, who risked his life in the fight against yellow fever and who first dramatized the use of the human volunteer in experimental medicine.

Dr. Max Sadove, Head of the Department of Anesthesiology of the University of Illinois, was elected organizing President.

Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital, was awarded the French Legion of Honor Medal, December 27, making him a knight of the Legion of Honor. The ceremonies took place in Dr. Overholser's home on the Hospital grounds. Dr. Yves Porc'her, a psychiatrist and a hero of the French resistance movement during World War II, presented the medal to Dr. Overholser. Pierre Dupont, French Consul, represented the French Government at the ceremonies.

Dr. Overholser, who was one of six persons who were voted to receive the medal last July at the International Congress of Psychiatry in Paris, worked with French civilians while serving with the U. S. Army during World War I. He was Chairman of the United States delegation to the International Congress on Mental Health in 1948 and toured European countries to study mental health problems. The medal was awarded to him because of his world-wide interest in psychiatry. Mr. Dupont added that it was also intended to honor the American people for their friendship to the French.

President of the Medical Society, **Dr. Frank D. Costenbader,** was a member of the Special Gifts Committee for **The March of Dimes,** the annual campaign for funds for the National Foundation for Infantile Paralysis, Inc. The money collected is used not only for treatment but for research aimed at prevention of the disease.

Dr. Brian B. Blades, Professor of Surgery, George Washington University School of Medicine, was elected Secretary of the Special Medical Advisory Group of the Veterans Administration, effective January 1. Dr. Derrick T. Vail, of Northwestern University, was named Chairman of the Group, succeeding Dr. Charles W. Mayo, of the Mayo Clinic, Rochester, who has served as Chairman since the Group was organized six years ago. Dr. Mayo will continue as a member of the Group.

The Special Medical Advisory Group is composed of 20 members, all nationally known in the field of medicine, nursing, and social sciences. They constitute the top medical advisory group in VA under the provisions of the law that provided for the creation of VA's Department of Medicine and Surgery in 1945. They serve in an advisory capacity in the establishment of policies for the Department of Medicine and Surgery.

Another Washington member of the Advisory Group is Dr. Arthur C. Christie.

Dr. Irvin Hantman presented a paper on "Secretory Otitis Media" before the Ear, Nose and Throat Section of the New York Academy of Medicine in New York City, November 19.

Dr. Harold Jeghers, Professor of Medicine, Georgetown University School of Medicine, was in Buffalo, New York, November 6 to 9, where he visited Mercy Hospital in connection with the teaching program which has been established between this hospital and Georgetown. On November 9 he lectured before the regional meeting of the Catholic Hospital Association on the subject, "Improving the Educational Program in the Hospital."

During the last week in October Dr. Jeghers attended the 1951 meeting of the Association of American Medical Colleges in French Lick, Indiana.

Dr. A. Harry Ostrow, Director of Dental Services, District Health Department, was one of seven alumni honored by Central High School Alumni Association at its 44th annual reunion in the Shoreham Hotel, December 27. Dr. Ostrow, of the Class of 1921, was recognized as a pioneer in the water fluoridation program of the District of Columbia. He has written an editorial on the subject of water fluoridation which appears in this issue of the MEDICAL ANNALS.

Dr. John J. Curry, Assistant Professor of Medicine at Georgetown University School of Medicine, addressed a meeting of the Montgomery County Medical Society, January 15, in Olney Inn, Olney, Md. Dr. Curry's paper was entitled, "The Evaluation of Shortness of Breath."

Dr. Russell L. Haden, Medical Director of the American Red Cross blood program, has been appointed Chairman of the program's Committee on Medical Policies and Procedures. In this capacity Dr. Haden succeeds Dr. Ross T. McIntire, who retired as Committee Chairman last November but continues to serve as a member of the Committee in a volunteer capacity.

Captain Joseph W. Watson, internist at the 382nd General Hospital near Osaka, Japan, was a recent participant in a Symposium on Epidemic Hemorrhagic Fever held at the Tokyo Army Hospital. His topic was "Sequela of Epidemic Hemorrhagic Fever in the Convalescent Phase."

Captain Watson was recalled to active duty with the 382nd General Hospital early in 1951.

Dr. Frederick B. Brandt is a diplomate of the American Board of Surgery, having been certified by the Board in December, 1951.

Several removals from Washington of Medical Society members have been reported:

Dr. Benjamin F. Miller, who has been living in Boston for some time past, has decided to remain there. His address is 217 Kent Street, Brookline 46, Mass.

Dr. William H. Woodson is practicing his specialty, orthopedic surgery, in Twin Falls, Idaho. His office is located in the Medical Arts Building, 106 Locust Street North.

Dr. Kaden Tierney has moved his office and practice to Milford, Delaware.

Major Theresa T. Woo is presently stationed at the U. S. Army Hospital in Fort Belvoir, Va.

MEMBERSHIP

The following applicants for membership were duly elected to membership at the meeting of the Executive Board, December 17, 1951, in accord with Amendment XI, Section 2, of the Constitution and By-laws of the Society.

Active Members

Harvey H. Ammerman, 1612 Rhode Island Avenue, N.W.
James Esten Abel, 4536 3rd Street, S.E.
James B. Bain, 1712 Rhode Island Avenue, N.W.
David F. Bell, Jr., 1150 Connecticut Avenue, N.W.
Theodore Bisland, Gallinger Municipal Hospital
Henry F. Capozzella, 4127 River Road, N.W.
Herbert Cohen, 1728 Massachusetts Avenue, N.W.
Robert Day, 2000 Massachusetts Avenue, N.W.
Russell B. Diley, 819 Carroll Avenue, Takoma Park, Md.
Sanford H. Eisenberg, 1918 K Street, N.W.
Leon Ferber, 2025 Eye Street, N.W.
Frank A. Finnerty, Jr., Marshall Drive, RFD 2, Fairfax, Va.
Robert J. Furie, 4520 MacArthur Boulevard, N.W.
Jason Geiger, 3200 16th Street, N.W.
Seymour Greenbaum, 9300 Ewing Drive, Bethesda, Md.
Edwin S. Kessler, 1464 Columbia Road, N.W.
Van Wyke Gunter, 2110 Dennis Avenue, Silver Spring, Md.
John P. Haberlin, 1907 Eye Street, N.W.
Charles W. Humphreys, Jr., 4508 38th Street, N.W.
Harold B. Lehrman, 1728 Massachusetts Avenue, N.W.
Leon McNeely Liverett, 1801 K Street, N.W.
Joseph C. McCarthy, 5229 11th Street, South, Arlington, Va.
John R. O'Brien, 7314 Bradley Boulevard, Bethesda, Md.
Louis Schwartz, 915 19th Street, N.W.
Robert W. Sjogren, 1835 Eye Street, N.W.
Herbert Wanderman, 1723 M Street, N.W.
Herbert M. Wechsler, 900 17th Street, N.W.
Frank B. Whitesell, Jr., 3000 Connecticut Avenue, N.W.

Associate Members

Robert H. Anderson, 3523 Valley Drive, Alexandria, Va.
John Lawrence Avery, 1611 Monroe Street, N.W.
Louis L. Cross, Jr., 1319 Maple View Place, S.E.
James Burnett Gilbert, 507 South Lee Street, Alexandria, Va.
Alexander Goulard, Jr., 1809 24th Street, N.W.
Efrain Guerrero Z, 2125 Le Roy Place, N.W.
Thomas E. Mattingly, Jr., 2710 Upshur Street, Mt. Rainier, Md.
Seward E. Miller, 4513 Saul Road, Kensington, Md.
F. E. Musser, 7409 Varnum Street, Landover Hills, Md.
George Peter Petropoulos, 1228 11th Street, N.W.
John R. Portaria, 113 Carroll Street, Takoma Park, Md.
Jackson A. Saxon, 7806 Garland Avenue, Takoma Park, Md.
Hans Frank Smetana, 5521 Hoover Street, Bethesda, Md.
Irene G. Tamagna, 6501 Connecticut Avenue, N.W.
Russell McF. Tilley, 3900 Hamilton Street, Hyattsville, Md.

Affiliate Member

Robert L. Norment, 1801 Eye Street, N.W.

Resident-Intern Member

Peter Soyster, 1911 Howard Court, Falls Church, Va.

Recent changes in membership status:

Active to Associate

John M. Baber
James N. Greear
Blaine H. Eig
Hubert B. Haywood, Jr.
Henry R. Lyons
Edward C. Morse
Hyman J. Zimmerman

Affiliate to Associate

Joseph W. Stein

Resigned

Active

Francis A. Barrett
Harold L. Dyer
Elizabeth B. Goldsworthy
Edward B. McCabe

Associate

Robert L. Roy
Joseph J. Tamasi
William E. Torrey

Affiliate

John A. Norcross

Resident-Intern

Dan B. Greer

Five New Life Members

Chapter II, Article IV, of the Constitution of the Society, reads as follows:

> Life members shall be active members who have been active members for a total of forty years. They shall have all of the privileges of active membership and shall be exempt from paying dues and assessments.

Our honor roll now numbers 77. The congratulations of the Society are extended to:

Seniority Number		*Date of Membership*
547	Joseph B. Bogan	February 9, 1911
553	Lewis C. Ecker	April 25, 1911
555	Harry A. Ong	May 17, 1911
557	William J. Mallory	May 24, 1911
562	John W. Burke	October 5, 1911

who have for forty years been on the roster, meeting all dues and assessments and lending their support to the Society by frequent attendance. Their status is now elevated to Life membership.

OSCAR BENWOOD HUNTER, M.D.

OSCAR BENWOOD HUNTER, A.B., A.M., M.D., F.A.C.P.

(1888–1951)

It seems only yesterday that I was talking over a professional problem with Dr. Oscar Benwood Hunter. He was attacking the problem from all angles, as always, in search of an answer. That day, Wednesday, December 19, 1951, was a typical day in the life of this tireless and dynamic man, but its closing hours brought to a sudden end two-score years of work on behalf of humanity, his chosen profession, and countless civic activities. For Dr. Hunter such a program on the day of his death was quite normal, the sort of program he would have planned if given a choice.

Oscar Hunter was indefatigable in his fight to maintain the rights and traditions of the medical profession. I have heard him say many times, "The doctor today must be both a doctor and a politician." This axiom typified his knack of mixing the practical with the human. He liked people but he did not stop there. Rather he devoted his tireless energy, night and day, to organizing them into forces for good. For many years he let the human side dominate his career. The ink was barely dry on his George Washington University Medical School diploma when he first stood in front of a class as instructor in anatomy. That was in 1912. A year later he was a full professor at the school, continuing his pedagogical career through two decades.

Even while teaching full-time, Dr. Hunter took part in outside activities. A natural organizer, he was soon a leading figure in a dozen corollary fields. In spare time he acquired A.B. and A.M. degrees, four and five years, respectively, after receiving his medical degree. Those formative years in his professional career were marked by intense work and study, particularly in pathology and bacteriology. They were years of churning activity, a pace that he always maintained.

Dr. Hunter's practical side inevitably led him two decades ago from pedagogy to private practice. A born teacher, he had already spent twenty years showing others how to practice the medical arts. In the process he frequently served as consultant, a role he loved. With only a look at the patient and a glance in the microscope his diagnostic acumen permitted early impressions that were usually confirmed by further clinical study.

Believing that in organization there is strength, Dr. Hunter held a deep conviction that a committee assignment or official role imposed an obligation to serve to the best of his ability. A mere listing of his official capacities would more than fill these columns. Suffice it to say, he always managed to find time and energy to carry forward the causes in which he believed.

There are more than a dozen presidencies of important organizations, honors he earned and cherished. Among these were: The Medical Society of the District of Columbia (President 1928); Southern Medical Association (President 1948–49); American Therapeutic Society (President 1938–39 and Secretary 1934–38 and since 1939); Washington Society of Pathologists (President 1937–38); The George Washington University Medical Society (President 1918–19 and 1938–39 and Secretary since 1939); and General Alumni Association of the George Washington University (President 1928–29 and 1929–30). In his last months he devoted many hours to the Vice-Presidency of the American Medical Association. Hardly a fortnight before his death he flew to the West Coast to take part in the interim meeting of the Association. His active affiliations in recent years included twenty-five important professional societies besides as many semi-professional and civic organizations.

Nationally famed as a pathologist, he was a member of the College of American Pathologists, a Fellow of the American College of Physicians, and a diplomate of the American Board of Pathology. He had contributed more than fifty articles to medical journals.

His many professional achievements include the development of a laboratory with a staff of more than thirty. He was constantly driving and building. One of the active organizers of the Medical Center in Washington, Dr. Hunter personally encouraged the sale of the capital stock of Doctors Hospital to his professional colleagues, in whom, he thought, should rest the destiny of this venture. He served as active Secretary of the four operating corporations.

His multifarious activities included a directorship of the American Automobile Association; membership in the Navy League; trustee of Group Hospitalization, Inc., which he helped organize; and Major (inactive) in the Army Medical Reserve Corps. He was a member of the University Club, Kiwanis Club (President 1941), Cosmos Club, International Medical Club (President 1951), and Corinthian Yacht Club. His yacht *Decoy* was burned during World War II while flying the Coast Guard flag.

Supported by a loyal and devoted family, Dr. Hunter was a gracious host to his many friends and his hospitality was unlimited. Much of the story of Oscar Hunter, the man, will never be told, simply because he did not choose to publicize a side of his life familiar only to his family and to the benficiaries of his boundless generosity and sympathy for humanity. For years he lent a helping hand to many medical students and striving young physicians. He gave time and money to the Kiwanis' efforts on behalf of crippled children.

Dr. Hunter nearly qualified as a native Washingtonian, having been born in neighboring Cherrydale, Virginia, January 31, 1888. He married Sidney Sophia Pearson, December 26, 1914. Mrs. Hunter and four children survive him: Dr. Oscar Benwood Hunter, Jr., Mrs. Richard H. Fischer, Miss Mary Ellen Hunter, and Mrs. William M. Simpich.

As I look back on the career of Dr. Oscar Benwood Hunter I see him in his familiar pose—hands clasped above his head—his way of acknowledging public greetings. This was his symbol of success, unity, brotherhood and good will.

ARNOLD MCNITT, M.D.

Sympathomimetic Amines—Lands and Tainter

(*Continued from page 68*)

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"...Our Greatest Bulwark..."—Observer

(*Continued from page 103*)

tinuously in an effort to broaden their coverage and at the same time avoid miscalculations which would result in financial difficulties.

One has the uncomfortable feeling that too many doctors are unaware of this situation and, if they are, they are lulled into the belief that whatever happens they will not personally be affected. Nothing could be further from the truth. If Blue Shield plans fail for the lack of medical support, Government intervention is inevitable. Blue Shield and all other prepayment plans sponsored by medical organizations must be made to work. There is no alternative if the doctors wish to control their own destiny.

T. W.

MEDICAL ANNALS
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CONGENITAL OBSTRUCTION OF THE URINARY TRACT*

MEREDITH CAMPBELL, M.D.
Professor of Urology, New York University Post Graduate Medical School

URINARY obstruction and infection account for nine tenths of the major urologic problems in infants and children. Most of these obstructions are consequent to congenital urinary tract malformations, many of the anomalies being actively obstructive while others are potentially so. It is axiomatic that the urinary stasis, whether due to obstruction or other cause, predisposes to the advent of infection and that once established the infection is unlikely to be cured until the stasis-producing condition or conditions are eradicated.

Irrespective of infection, the constant important end result of urinary blockage is hydronephrosis with its accompanying renal injury which may be unilateral or bilateral according to its etiology. Ureteral, vesical and/or urethral dilatation occurs proximal to the blockage and correlative to the location and severity of the obstruction. The causes of hydronephrosis in infants and children are given in table 1. This shows the wide variety of potential obstructive lesions to which these young patients may be heir; it will be noted that the majority of the more important conditions are congenital. Between 4 and 5 per cent of all children are born with some kind of urinary obstruction; in many the lesion is only a tight external urethral meatus, but even this condition is of great potential obstructive import. In nearly every case the nature of the obstructing lesion can be determined by adequate urologic examination (table 2).

SYMPTOMS

The symptoms of urinary obstruction are local and systemic. The local manifestations are concerned with pain or renal tenderness in hydronephrosis or ureteral obstruction, for example, or urinary frequency or difficulty in lower tract blockage as in contracted bladder neck, urethral stricture, and so forth. Sometimes the hydronephrotic kidney, the chronically distended bladder, or a urethral diverticulum presents a palpable mass, perhaps even first detected by the child. Hematuria, acute or chronic complete vesical retention, dribbling, dysuria, or even "enuresis" may reflect the obstruction. Most of these children are urologically examined because of persistent gross pyuria.

The systemic symptoms are consequent to

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* Address delivered before the Twenty-second Annual Scientific Assembly of the Medical Society of the District of Columbia, October 3, 1951.

TABLE 1

Causes of Hydronephrosis

Congenital	*Congenital or Acquired*
Pelvis and Kidney	
Renal anomalies of number, form, location, size, etc.	Abnormal ureteral insertion Stricture at pelvic outlet
Accessory renal vessels	
Ureter	
Anomalies of number	Stricture
Anomalies of termination	Stenosis
Valves and folds	Atony
Ureterocele	Spasm
Vascular blockage	Cystic dilatation
1. Primary	Kinks
2. Secondary	Angulations
Torsion	Diverticulum
Bladder	
Anomalies: Exstrophy, reduplicated, bipartite, etc.	Contracture of vesical neck Hypertrophy of vesical neck Median bar
Trigonal curtain obstruction	Hypertrophy of interureteric ridge
Ureterocele	Diverticulum
Hydrocolpos	Neuromuscular disease
	1. Cord bladder
	2. Atonic bladder
Urethra	
Posterior urethral valves	Phimosis
Penile torsion	Meatus stenosis
Abnormal openings	Meatus atresia
1. Epispadias	Stricture
2. Hypospadias	Cysts
	Diverticulum
	Hypertrophied verumontanum
	Hydrocolpos

renal injury by urinary back pressure (hydronephrotic damage) and by toxic absorption consequent to declining renal function or from secondary infection. In children these toxic influences are sharply reflected by fever and, in the gastrointestinal tract, by indigestion, malaise, anorexia, nausea, vomiting, constipation, diarrhea, anemia, and failure to gain or even loss of weight. In over half of all children with severe urinary obstruction and renal injury the gastrointestinal symptoms or toxic nervous system manifestations (nervousness, headache, convulsions) are predominant and commonly cause the urinary obstruction to be overlooked. The more important symptoms in urinary obstruction in the young and, by the same token those which call for urologic examination, are given in table 2.

TABLE 2

Indications for Urologic Investigation

1. Pyuria
   a. Acute, persistent
   b. Chronic
2. Disturbances of urination: dysuria, frequency, urgency, etc.
3. Hematuria (except acute nephritis)
4. Abdominal pain
5. Abdominal tumor
6. Anomaly of external genitalia
7. Urogenital injury
8. Hypertension
9. Renal insufficiency
10. Enuresis
11. Spinal cord injury and disease
12. Retarded growth

DIAGNOSIS

Diagnosis rests upon adequate urologic examination, the indications for which are given in table 2. The investigative steps and the usual order of their employment are shown in table 3.

TABLE 3

Routine of Urologic Examination in Infants and Children

1. Careful physical examination—especially palpation of urinary and reproductive tracts. Rectal examination.
2. Examination of catheterized urine specimens: albumin, sugar, pus, blood, bacteria (stain and culture)
3. Two-hour phenolsulfonphthalein test (intramuscular)
4. Blood chemistry (nonprotein or urea nitrogen, CO_2)
5. Plain film of urinary tract for calculi and spinal defects
6. Cystogram
7. Determination of residual urine
8. Cystoscopy (general anesthesia in about 50%):
   a. Observation of bladder wall, outlet, and posterior urethra
   b. Ureteral catheterization
   c. Divided renal specimen collection
   d. Divided renal function tests (P.S.P. or indigo carmine)
   e. Pyelography when indicated.

Fortunately it is not always necessary to perform all of these studies in every case, but the examination should be pursued to a definitive conclusion, it being possible in practically each instance to make a reasonably accurate anatomic diagnosis.

TREATMENT

Treatment depends upon the diagnostic findings; the fundamentals of therapy are the eradication of the obstruction and of infection and/or other complicating conditions. The blockage having been removed, these patients should not be considered cured until the urine has been sterilized as evidenced by at least 2 negative cultures of aseptically collected specimens. This last implies catheterization in females of all ages and also in males when proper collection cannot be made from the voiding stream.

In many cases unilateral renal damage is so pronounced that only nephrectomy is indicated; sometimes both the kidney and ureter must be removed. When the renal damage is bilateral and far advanced only permanent bilateral nephrostomy offers hope of preserving life. Fortunately the happy combination of young resilient tissues (especially renal) and modern chemotherapy and/or antibiotic therapy permit us now to undertake, with every prospect of success, major urosurgical procedures, largely conservative, which only 10 years ago would have been deemed hopeless or even fatal. With proper attention to avoidance of trauma, with control of infection, and with the employment of modern surgical safeguards, infants and children withstand better than do adults complete cystoscopic and pyelographic examination as well as major urosurgery. Their reactions, febrile or otherwise, are in general fewer and less severe.

COMMON FORMS OF OBSTRUCTION

In the following paragraphs are briefly discussed some of the more common and important congenital urinary obstructions in the young, the clinical and therapeutic management of which comprises the largest portion of urologic practice in young patients. Many of the more severe congenital obstructions are fatal in infancy. Because of the high early mortality they engender, the graver congenital obstructions are rarely observed in adults because most of these patients die young.

Congenital stenosis of the prepuce is an extremely rare obstruction which, when not promptly recognized and corrected, is fatal in early neonatal life. I know of 5 such cases in the New York Metropolitan Area, with death occurring in all within the first 2 weeks of life. Circumcision is the treatment.

Stenosis of the external urethral meatus is a common congenital obstruction which occurs with equal potential severity in both sexes, although it is more likely to be recognized in the male and notably when complicating ulcerative meatitis and perimeatitis exists. Urinary difficulty and frequency with great straining to void and the passage of a fine hairlike stream of urine are the usual symptoms. Blood on the clothing from bleeding ulcerative meatitis is probably the most frequent and alarming manifestation which brings these male children for relief. In the female, urinary frequency and chronic pyuria are the usual symptoms, but in many the clinical picture has caused the diagnosis of enuresis to be made. The diagnosis of meatal stenosis is readily made by inspection; urography not infrequently discloses massive dilatation of the entire proximal urinary tract. Wide meatotomy is the treatment. It is important that this procedure be followed at appropriate intervals with meatal dilation by sounds, usually a week, then 2 and 3 weeks after meatotomy. Parenthetically, meatotomy and the maintenance of a normal meatal caliber alone cures ulcerative meatitis.

Congenital stricture elsewhere in the urethra is not infrequent, the penoscrotal junction being the usual site of predilection, although I have encountered the condition in all portions of the canal. The symptoms are those of lower tract obstruction; secondary urinary infection and pyuria are frequent complications, as are urethral diverticula and calculi proximal to the obstruction. The diagnosis may be suspected from the history or by the grasping of an instrument of normal size by the stricture, and is confirmed by urethroscopy. Most urethral strictures in the young respond readily to periodic progressive dilation with sounds; rarely is internal or external urethrotomy necessary and only when dilation is technically impossible or, consistently employed, has failed to cure.

Urethral diverticulum which has formed as a blowout process behind a congenital stricture may disappear following adequate dilation of the canal but, if not, demands excision. Calculi forming in these pockets or developing proximal to urethral stricture require removal, transurethrally or by urethrostomy.

Congenital contracture of the vesical outlet, congenital valves of the prostatic urethra, congenital hypertrophy of the verumontanum, and sphincterospastic neuromuscular vesical disease consequent to congenital central nervous system spinal malformation are 4 obstructive entities of vital import. All of these conditions produce the same destructive back-pressure changes in the upper urinary tract, cause essentially the same clinical manifestations, and require the same fundamental treatment—eradication of the blockage and of infection and other complicating conditions such as stone. As the vesical residual urine increases and the functional bladder capacity is correspondingly diminished, urinary frequency becomes pronounced (even every 10 or 15 minutes), and, with chronic complete retention, overflow with paradoxical or pseudoincontinence appears. Pyuria denotes secondary urinary infection as may hematuria, but the last commonly occurs in all varieties of obstruction and results from the intense congestion of the urinary organs above the point of blockage.

In most of these cases removal of the obstructing lesion by transurethral resection solves the problem, this treatment being employed only at a time when the condition of the patient warrants. In patients with advanced renal damage by urinary back pressure and infection, preliminary cystostomy drainage is indicated exactly as we are accustomed to employ it in the preliminary treatment of advanced prostatic obstructive disease in adults. The prognosis depends on the extent of the renal damage by urinary back pressure and infection, the promptness and completeness with which the obstruction is removed, and the response of infection to treatment.

Congenital contracture of the vesical outlet occurs as a concentric narrowing in both sexes and is histologically recognized either as a submucous fibrosis or as a massive muscular overgrowth lending a remarkable rigidity to the tight bladder orifice. The diagnosis is made by cystourethroscopy, the employment of a forward vision instrument being essential for the identification of this lesion as well as for all other obstructions in the urethra or at the bladder outlet. Not only will the smoothly rounded collar-like contracted vesical outlet be seen but also the secondary trigonal hypertrophy, the trabeculation and muscular hypertrophy of the bladder wall proper, and complicating diverticula or stone. Determination of the renal function by excretion and retention tests (blood chemistry: nonprotein nitrogen, urea) is essential, and at least a satisfactory excretory urographic study should be made, although I prefer the retrograde method. Sometimes by vesicoureteral reflux the widely dilated upper tract is demonstrated. Transurethral resection is usually satisfactory treatment, being performed with a 16 F. miniature resectoscope, the introduction of which through an external urethrostomy is required in infant males and in all other boys when a diminished urethral caliber demands. In the past I have often satisfactorily employed the suprapubic excision of a large V-wedge from the inferior segment of the contracted bladder outlet and still consider it a thoroughly satisfactory procedure although of greater surgical magnitude than transurethral resection.

Congenital valves of the prostatic urethra appear as large mucosal folds which are usually attached to the verumontanum and pass anteriorly, laterally or posteriorly to the urethral wall and/or vesical outlet respectively, are almost always bilateral, and are not to be confused with the normal urethral frenula. Rarely the valves exist as an iris diaphragm-type of obstruction. As urine strikes these valves they balloon in cusp formation, urethroscopically appearing much as cardiac cusps. The symptoms are those common to deep urethral obstructions as previously described, usually exist from birth, and are notably those of the urinary difficulty. The diagnosis is readily made by cystourethroscopy; having once observed a case, a urologist could scarcely fail to recognize the condition again. These valves should be removed by transurethral electroexcision.

Congenital hypertrophy of the verumontanum is a cellular hypertrophic lesion in which the organ frequently becomes 3 to 5 times normal size, often fills the deep urethra, in some cases even extending into the vesical outlet or into the bladder cavity itself, and in all events produces obstruction. The lesion is readily recognized urethroscopically, and its removal by transurethral resection is the treatment.

Sphincterospastic neuromuscular vesical disease is a frequent affliction in the young, in whom it is usually consequent to injury or malformation of the lower spinal cord in association with congenital neurovertebral fusion anomalies. The obstructive lesion frequently simulates contracture of the vesical outlet, from which it must be differentiated, a comprehensive neurologic examination including cystometry being an essential part of the study. In many of these cases somatic neural changes are not demonstrable. It seems likely that the faulty neurogenesis here is in the parasympathetic nervous system with a pronounced reduction in the number of ganglion cells comparable to and often a part of this anomaly in congenital megacolon (Hirschsprung's disease), as Swenson and his co-workers have demonstrated. Although the treatment of sphincterospastic neuromuscular vesical disease is often extremely difficult and commonly unsatisfactory, excellent results have been achieved by transurethral resection in many cases and notably in those simulating contracture of the vesical outlet. When this fails, permanent suprapubic cystostomy drainage will perpetuate life. In general, neurosurgery has little to offer.

Congenital obstructive lesions of the upper urinary tract are essentially those involving the ureter, notably stricture, kinks, and vascular obstruction. Congenital stricture of a renal calyx may occur with the development of localized hydronephrosis and sometimes secondary stone. In all obstructive lesions of the upper urinary tract abdominal pain or pain along the course of the ureter tract is the commonest symptom and by visceral reflex is frequently manifested by gastrointestinal disturbances. The incidence of complicating urinary infection is high, and many of these children with congenital upper tract obstruction have their fundamental lesion identified by urologic examination demanded by persistent pyuria. Hematuria results from infection or the congestion of the proximal urinary tract. By visceral reflex or by systemic toxemia consequent to advanced renal damage and diminished renal function, the same gastrointestinal disturbances may appear as previously described in the discussion of symptoms of congenital urinary obstruction.

The diagnosis of congenital upper tract blockage can be made by complete urologic investigation in which retrograde urography plays an essential role. Excretory urography may afford a preliminary clue, but in half of the children in whom the method is employed the results are inconclusive or the study is otherwise unsatisfactory. For this reason we employ retrograde urography routinely for thorough urologic investigation in the young and particularly when surgical therapy is likely to be employed.

Ureteral stricture occurs congenitally in about 1 per cent of all newborn infants, is commonly bilateral, and is found more often at the ureterovesical junction than at the ureteropelvic junction, being least frequent in the body of the ureter. These strictures are frequently multiple although I have not encountered more than 3 in a ureter. Histogenetically many of these strictures begin as mucosal redundancies with angulation, looping, and fibrous periureteral fixation, while in others they are simply congenital noninflammatory narrowings comparable to similar congenital narrowings observed in the intestinal, pulmonary, biliary and vascular tracts. Dilatation occurs in the ureter above the point of obstruction, and the nearer the blockage is to the kidney, the earlier and more severe will be the resulting hydronephrosis. Frequently, in grave ureterovesical junction stricture, lateral dilatation increases the ureteral caliber to the size of the colon and by longitudinal dilatation the ureteral length is frequently doubled, this resulting in extreme angulation, tortuosity and secondary kinking. This kinking, in turn, commonly gives rise to secondary obstruction, a point of great therapeutic importance in the surgical treatment of these cases, since, with adequate relief of the ureterovesical junction stricture, for example, free renal drainage is not always afforded because of the ureteral angulation or kinking above. The abdominal pain caused by ureteral stricture, and notably when it involves the lower third of the duct, too frequently leads to the erroneous diagnosis of chronic appendicitis and the performance of appendectomy.

Having established the diagnosis by urologic examination including ureteral calibration by the exploratory catheter and by urography, periodic progressive cystoscopic dilation of the stricture is the conservative treatment and is often thoroughly effective when the stricture is in the lower ureteral segment. Dilation nearly always fails in the treatment of upper ureteral strictures.

Surgical treatment must be employed when conservative dilation fails to cure or when this method is obviously unwarranted from the start. If the kidney is hopelessly damaged, nephrectomy or ureteronephrectomy with removal of the duct to a point below the obstruction is the indication. In bilateral congenital stricture or when the kidney must or can be saved, temporary or permanent nephrostomy and/or ureteroplastic procedures are employed. In stricture at the ureteropelvic junction in which the Foley-Schweizer Y-plasty operation is not feasible because of the length of the stricture-bearing area, longitudinal incision through the constricted segment with T-tube intubation after the method of Davis has given me the best results. This last procedure is also my choice when the stricture is in the body of the ureter and longitudinal dilatation is slight. Whatever method is employed for the removal of the ureteral obstruction, free ureteral drainage must be maintained postoperatively as evidenced by cystoscopic and urographic check-up. No patient is cured until both the blockage and infection as well as other complications such as stone have been eradicated.

When the stricture is at the ureterovesical junction, wide incision with intubation for 10 days postoperatively is frequently effective, as is ureteroneocystostomy. In several cases I have employed a pull-through operation in which, in addition to establishing free ureterovesical junction drainage, several inches of redundant dilated ureter can readily be removed at the same time.

Congenital ureteral kinks are extremely rare. When there is firm fixation of the angulated segment with obstruction or symptoms, surgical ureterolysis with renal suspension is the treatment.

Compression and obstruction of the ureter by anomalous vessels, both arteries and veins, have been observed at all levels of the duct. We are chiefly concerned with anomalous lower polar renal vessels which are found in at least 25 per cent of all individuals. In some cases the obstruction is doubtless primarily caused by compression of the ureter by the anomalous vessel traversing it, but in most cases the obstruction is secondary; either ureteral dilatation induced by peripheral obstruction has in turn compressed the duct against the vessel, or with hydronephrosis the kidney has secondarily sagged over the vessel which otherwise would be blameless.

The symptoms are those common to upper tract obstruction, "chronic pyelitis" being the diagnosis in about half of the cases. The course of the obstructing vessel can sometimes be urographically demonstrated as a negative shadow traversing the ureter, and in all cases the site of the vascular obstruction can be thus indicated. Urographic differentiation between fibrous band, ureteral stricture and anomalous blood vessel as the cause of the blockage is not always possible.

Relief of the obstruction is the treatment unless advanced renal destruction demands nephrectomy, as it has in over half of the more than 50 infants and children I have seen with this condition. When the kidney can be saved, the obstructing vessels are divided and such steps as necessary are taken to insure free renal drainage. In general, renal veins may be cut with impunity, but no artery supplying more than a fourth of the parenchyma should be cut, the arterial circulation here being a terminal one. Ureteroplastic procedures are employed to circumvent an obstructing artery which must not be cut. The high incidence of nephrectomy demanded in these cases may be considered the fruit of medical neglect.

SUMMARY

The commoner congenital obstructions of the urinary tract have been briefly discussed. Renal damage with hydronephrosis and complicating infection are the prime considerations. The symptoms are those locally engendered by the obstruction itself and toxic manifestations systemically reflected, notably in the gastrointestinal tract and nervous system. A correct anatomic diagnosis can be made in practically every case by adequate urologic examination. The prognosis depends upon the severity of the renal damage and complications, and the promptness and completeness of therapy. Treatment is carried out according to surgical indication. In many patients simple conservative measures suffice and are lifesaving, while in others complicated major urosurgery is demanded, sometimes with multiple-stage procedures. Correct early diagnosis and treatment will forestall nephrectomy and other grave urosurgery in a large portion of these cases; the preventable loss of a kidney may be considered the fruit of medical neglect.

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THE SURGICAL TREATMENT OF PULMONIC STENOSIS*

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THE surgical treatment of pulmonic stenosis is confined at present to treatment of congenital lesions. Pulmonic stenosis can be divided into two forms, the tetralogy of Fallot being one, the so-called "pure" pulmonic stenosis being the other. The "pure" pulmonic stenoses can be further subdivided. Approximately 70 per cent of "pure" pulmonic stenosis is accompanied by an interauricular septal defect. The other 30 per cent have no associated defects and are known as uncomplicated pulmonic stenoses. In a review in 1949 Green et al[1] were able to collect only 68 cases of uncomplicated pulmonic stenosis. However, there is reason to believe that the incidence of uncomplicated stenosis is much higher than this. Many additional cases have been seen in the past few years as cardiac surgery has progressed and as the cardiac catheter has been widely used.

The anatomic lesions responsible for the pulmonic stenosis vary considerably. At times there is atresia of the pulmonary artery, although this atresia is usually accompanied by stenosis of the pulmonary valve. The stenosis may be confined to the pulmonary valve, the 3 valve cusps being fused into a cone-like structure with an opening of variable size at the summit. The narrowed opening causes a jet of blood to enter the pulmonary artery, which is usually dilated just distal to the stenotic valve. The cause of this post-stenotic dilatation is unknown. It is postulated that the jet of blood is responsible. The infundibular stenosis may be below the pulmonic valve in the infundibulum. The infundibular stenosis may be short or fusiform. A short infundibular stenosis may be near or some distance below the pulmonic valve. The anterior wall of the outflow tract may be thin or relatively thick.

The tetralogy of Fallot is the commonest form of cyanotic congenital heart disease. Pulmonic stenosis, interauricular septal defect, overriding of the aorta, and hypertrophy of the right ventricle are the 4 features which give this disease its name. Cyanosis is the outstanding clinical feature. The enlargement of the right ventricle and the decreased pulmonary artery markings can be seen in the X-ray films of the chest. Right axis deviation is present in the electrocardiogram. If the diagnosis is doubtful use of the cardiac catheter demonstrates the increased pressure in the right ventricle. If the catheter can be passed into the pulmonary artery, the hypotension will be found. A ventricular septal defect may be demonstrated.

The prognosis and the disability in a large degree are proportionate to the oxygen saturation of the arterial blood. Chronic anoxia with polycythemia permits only a small percentage of patients with tetralogy of Fallot to survive 2 decades of life without surgical therapy.

Uncomplicated pulmonic stenosis has the following diagnostic features.[2] There is usually a systolic murmur heard in the pulmonic valve area. The pulmonary artery is more than usually prominent. There are normal or decreased pulmonary vascular markings as the pulmonary arteries are followed out into the lungs. The electrocardiogram usually shows evidence of right ventricular hypertrophy. The systemic arterial oxygen saturation is normal unless the patient is in heart failure. The diagnosis can be proved by means of the cardiac catheter. The catheter will reveal high pressures in the right ventricle but low pressures in the pulmonary artery. In pulmonic stenosis with interauricular septal defect there will be a right to left shunt through the auricles. The patient will suffer from cyanosis and have lowered arterial oxygen saturation.

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Patients with "pure" pulmonic stenosis of severe degree do not have a much different prognosis than the patients with Fallot's tetralogy. Some patients with uncomplicated pulmonic stenosis of slight degree may live into adult life with only slight disability. The decision whether to treat patients surgically with "pure" pulmonic stenosis depends upon the degree of stenosis and the disability produced.

The surgical treatment of pulmonic stenosis is limited to those patients with inadequate pulmonary artery blood flow. This condition exists in the tetralogy of Fallot, in the uncomplicated pulmonic stenosis, and in the "pure" pulmonic stenosis with an interauricular septal defect. The pulmonary artery blood flow is not inadequate in patients who have interauricular septal defects alone or Eisenmenger's complex. Probably no form of surgical approach has had as rapid and as interesting a history as that of the development of surgical treatment of pulmonic stenosis. The first surgical attack was proposed and developed by Blalock and Taussig[3, 4, 5] in 1944 for the tetralogy of Fallot. The method developed was to anastomose the end of the subclavian artery to the side of the pulmonary artery. This permitted an additional amount of unoxygenated systemic blood to be circulated through the lungs for oxygenation. In approximately 75 per cent of the patients with the tetralogy of Fallot a marked improvement of the cyanosis occurred. In 1946 Potts[6] introduced his operation for tetralogy of Fallot wherein he made an anastomosis between the aorta and the pulmonary artery. This approach had distinct advantages in infants. In 1948 Brock[7, 8] proposed a direct attack of the pulmonic valve itself. In a small series of cases he developed instruments and technic for entering the heart through the wall of the right ventricle and relieving the stenosis. In cases in which the stenosis was in the valve a special valvulotome was devised for converting the stenosed valve into a bicuspid valve. For those cases of pulmonic stenosis in which the stenosis was infundibular in nature rather than or in addition to the pulmonic stenosis he performed an infundibulotomy. This consisted in punching out pieces of the infundibulum in such a fashion that the right ventricular outflow tract was enlarged.

The best form of treatment in the various types of pulmonic stenosis is still open to considerable debate and is changing from day to day.[9] Certain statements can probably be made at this time. First, in pure pulmonic stenosis with or without a patent foramen ovale the best treatment is probably a direct approach to the stenosis through the right ventricle. In these patients the production of a left to right shunt along the lines of a Blalock or Potts operation may only make the condition worse, since introducing more blood into the right auricle has the effect of raising the pressure in the right side of the heart and precipitating right heart failure. In the tetralogy of Fallot with atresia of the pulmonary artery the creation of a left to right shunt is the only form of treatment available at this moment. In cases of the tetralogy of Fallot in which the stenosis is in the valve the direct approach through the right ventricle may prove to be the preferable form of treatment. However, it is unfortunate that only a minority of patients with the tetralogy of Fallot have the stenosis in the valve. The majority have an infundibular type of stenosis. If the infundibular stenosis is short the direct approach is feasible. But if the infundibular stenosis is long, the direct attack becomes much more difficult and may be impossible. The best type of surgery for this type is still in considerable doubt.

The usual method for carrying out a direct attack on the pulmonic valve consists in making an anterior left thoracic incision. The pericardium is incised longitudinally anterior to the phrenic nerve and a flap of pericardium reflected medially. Palpation then usually reveals the dilated pulmonary artery. If there is pulmonic valve stenosis the fused cusps can be felt protruding into the lumen of the pulmonary artery. It is not infrequent that as the chest is opened the heart action rapidly deteriorates. Maneuvers to relieve the stenosis must be carried out forthwith, since the opening of the stenosis has permitted satisfactory resuscitation of some patients. Two stay sutures are placed at a point 6 cm. caudad to the valve ring. A longitudinal incision not quite through the endocardium is made into the myocardium. A probe is then passed through the incision into the pulmonary artery to locate the position of the stenosis. If there is a valve stenosis a small-sized valvulotome is passed in a horizontal fashion into the pulmonary artery. Larger valvulotomes are used to enlarge the opening sufficiently. The valvulotomes are followed by a sound to dilate the cut valve. Hemostasis is secured by the finger until the myocardium is sutured.

If the stenosis is infundibular the problem is more difficult. Diagnostic angiocardiography before operation and palpation of the exposed heart at operation may reveal the site of stenosis. The heart must be entered above or below the stenosis. If the stenosis is short, the opening may be enlarged by taking bites from the stenosis with a specially designed punch. If the stenosis is long, attempts to enlarge the narrowing will probably fail. The number of patients with this type of stenosis is not yet accurately known. It is apparently more rare than the short infundibular stenosis. It is to be hoped that a better form of therapy for the long stenosis will be evolved.

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THE ENZYMATIC DÉBRIDEMENT OF WAR WOUNDS*

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THE purpose of this paper is to relate some of our experience at Walter Reed Army Hospital on the use of enzymes in the débridement of our Korean casualties.

It has been known for some time that concentrates of streptococcal filtrate are lytic to fibrin and necrotic tissue. Tillett and Garner[1, 2] published reports in 1933 and 1934 showing the fibrinolytic activity of hemolytic streptococci and the isolation of the fibrinolytic principle. It was later shown by Tillett, Sherry and Christensen[3] that 30 to 70 per cent of the solids of inflammatory pleural exudates was a desoxyribose nucleoprotein and the viscidity of an inflammatory coagulum was directly proportional to the amount of nuclear protein present. This was found to originate in leukocytes of the exudate. Tillett et al[4] described a desoxyribose nuclease derived from streptococcal filtrates which depolymerizes the nucleoprotein. The fibrinolytic principle and the desoxyribose nuclease derived from the streptococcal filtrate were called streptokinase (SK) and streptodornase (SD), respectively.

Tillett and Sherry[5] and others[6–10] have reported excellent results with the use of the SK and SD mixture in empyema, chronic osteomyelitis and pyogenic arthritis. Toxic reactions were minimal and consisted of transient pyogenic reactions with occasional nausea, vomiting and leukocytosis, particularly when used in pleural cavities.

About the time that these reports were being made, Roettig[11] reported the use of crystalline trypsin in the treatment of empyema with results that appeared to simulate those obtained with SK-SD. This crystalline form of trypsin was obtained from the beef pancreas and prepared in a 50 per cent magnesium sulfate form. It is stable at room temperatures in dry form but loses its activity in solution at body or room temperature.

MATERIAL AND METHODS

Thirty-three Korean casualties were treated with SK-SD.† The material furnished was obtained from a filtrate of growing cultures of Lancefield Group C beta hemolytic streptococci. As the mixture after going into solution is unstable at room temperature, refrigeration was used. An attempt was made to keep the pH of the wound near the optimum range of 6.8 to 8.2 as shown by Kunitz[12] by the addition of acid sodium phosphate. Two methods of application were used. In the one group an ampule of SK-SD (100,000 units of SK with 40,000 of SD) was dissolved in 2 to 10 c.c. of isotonic sodium chloride and injected into the open wound beneath a rubber dam glued over the wound edges. Sinuses were injected directly through a polyethylene tube. The position of the patient was maintained to allow contact with the solution and substrate. Another group was treated at the suggestion of Sherry with a blend in a bland water soluble jelly and the pH adjusted to 7 by the addition of acid sodium phosphate. This mixture was first made to contain 10,000 units of SK and 3,600 of SD per gram. This was later increased 5 times. This mixture maintained more continuous contact with the necrotic tissue than any solution. Unused portions of the mixture could be stored under ordinary refrigeration but lost their streptokinase content rapidly while retaining the streptodornase strength.

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† The Streptokinase-Streptodornase (Varidase) mixture was supplied through the courtesy of Lederle Laboratories, New York, N. Y.

Of the 33 casualties treated during this series, 20 were of open wounds with exposed bone, 7 of open amputation stumps, and 6 of gangrenous digits following frostbite.

The wounds with compound fractures were treated through windows in casts by either the rubber dam or jelly method. The open amputation stumps were treated by applying the jelly mixture to the stump end within the stockinette used to maintain continuous skin traction. The gangrenous digits were treated either by plastic bags containing the solution or the jelly preparation. The treatment was carried out only once a day.

Prior to treatment the bacterial flora was determined and sensitivity tests run for antibiotics. The appropriate antibiotic was given throughout the treatment. Sinus depths were determined by lipiodol or diodrast injections and X-ray films. Photographs were taken before and during the treatment. The SK-SD débridement was continued until either the wound closed or a secondary operation was indicated and carried out.

The cases selected for treatment were in general those not amenable to any good immediate surgical procedure on admission or would not appear to respond to the usual nonoperative treatment of traction in the case of amputation stumps. All patients were over 3 weeks from the time of injury and had had some initial débridement and antibiotic therapy during their evacuation.

All showed an initial response with an increase in drainage in the first 48 hours. The exudate, at first viscid, became thin and watery. The malodor of the drainage gradually disappeared in the first few days, gratifying to the patient. Although cultures showed no great changes in the bacterial flora there was a quantitative reduction.

Of the 20 compound fractures or open wounds exposing bone 4 were about the ankle or foot with a resultant sinus formation. These closed spontaneously. Ten granulated over the exposed bone rapidly with final closure with split thickness skin graft and no additional bone loss. Six patients needed further sequestrectomies and other surgical procedures, 2 of which could not be considered to have benefited by the treatment. Of the 7 amputation stumps there was an apparent reduction in healing time of 4 to 6 weeks in 3. The usefulness of the mixture was doubtful in the remaining 4 because they required surgical release of the skin margins to effect the normal closure needed for revision.

In the weeping wounds of the digits at the demarcation zone between normal skin and the dry eschar the use of the SK-SD mixture seemed to hasten the cleaning up of this process. Since these men had had a comparatively long period allowed for definite demarcation the aid here was chiefly one of comfort with some stimulation of granulations at the remaining digital stump.

No systemic manifestations were encountered which required stopping the drug nor was any unfavorable viable tissue reaction encountered except in 2 cases of gangrenous digits treated with an impervious dressing encasing the entire foot.

Although the products are known to be antigenic,[13] no manifestations of allergy were found in our series.

Twelve additional cases were treated with crystalline trypsin.* Six of them were open amputation stumps, 2 were open wounds with exposed bone, 2 were sinuses to bone, and 2 were open wounds considered failures with the SK-SD treatment.

They were all treated with 250 mg. doses of the enzyme in a buffered magnesium sulfate solution or applied directly in the dried crystalline form. Sinuses were injected through a tube or filled with soluble capsules. The dosage was given every 3 hours during the day.

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* Crystalline trypsin (Tryptar) was supplied through the courtesy of Armour Laboratories, Chicago, Ill.

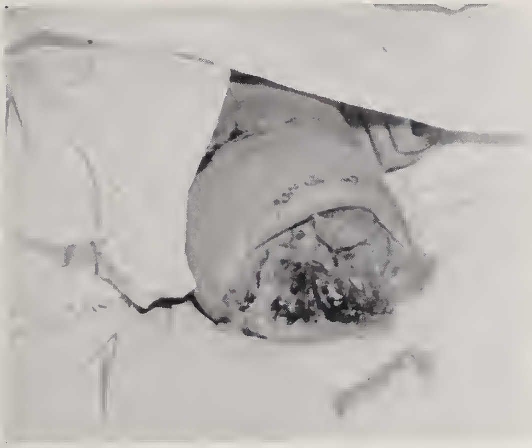

FIG. 1. Amputation stump before treatment with crystalline trypsin.

The most spectacular results were in the amputation stumps, 2 of which closed in 4 weeks. The remaining 4 had several weeks' reduction in traction time as compared to similar stumps but required further surgical assistance.

Of the 2 infected compound fractures with exposed bone, granulation continued in 1 until closure could be accomplished in 6 weeks. The other required surgical removal of some bone sequestra with later skin graft. The assistance of the treatment was doubtful in this case.

Of the 2 sinuses, 1 closed spontaneously and remained closed, the other required surgical exploration and removal of a hidden sequestrum which may have become better delineated by treatment.

In the 2 cases considered failures with SK-SD there was no important response to trypsin treatment, and the patients probably should have been subjected to more definitive surgery earlier. They had multiple exposures of bone and numerous sequestra.

All the amputees complained of burning on their stump ends when treated with the powder. This may have been due to the magnesium sulfate. The use of benadryl and/or buffering a solution controlled it. There was a more rapid hyperemia and increase in fluid than in the patients treated with SK-SD. This continued throughout the treatment and seemed to produce a wound more quickly adaptable to skin-grafting than was formerly produced.

There was no general ill effect from the dosage used except a slight increase in temperature in those cases showing a local effect in a large wound.

Figures 1 and 2 show an amputation stump before and after (4 weeks) treatment.

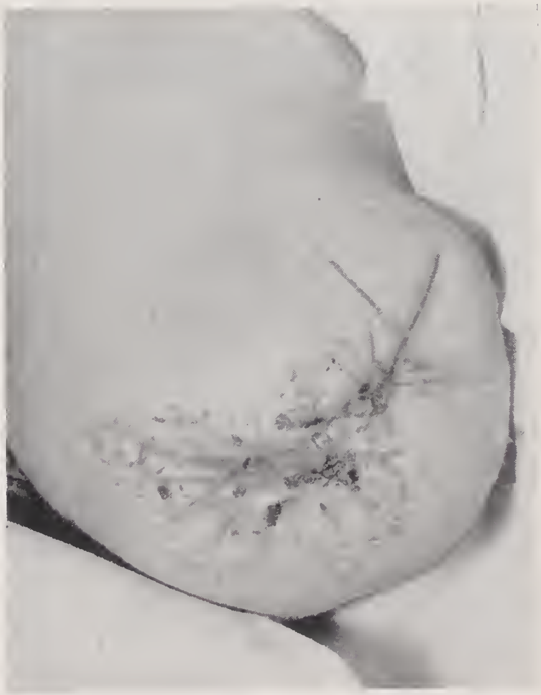

FIG. 2. Same stump as in figure 1 after 4 weeks of treatment.

CONCLUSIONS

Enzymatic débridement is a useful adjunct in the treatment of infected open wounds. It will not replace adequate surgical débridement and specific antibiotic therapy but will shorten the interval in preparing a necrotic wound for surgery. Some sinuses difficult to treat surgically may be closed without surgery. There appears

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RECENT ADVANCES IN IMMUNIZATION PRACTICES*†

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IMMUNIZATION against certain of the communicable diseases is an integral part of preventive medicine and one of the most potent factors in the improvement of child health. New vaccines are being developed, old ones are being improved, and the scope of disease control by active and passive immunization is being widened. As a result the practitioner who cares for children has been required to make frequent revisions in his immunization routine in order to take full advantage of newer developments and newer materials which are available.

Although every effort is being made to improve the vaccines, many studies have been directed toward establishing the optimum time for the administration of these antigens. Emphasis has been placed on determining just how early in life immunizations can be given with satisfactory results, especially in the case of pertussis. It is now evident that the very young infant, under the age of 6 months, can and does develop an active immunity when given the proper antigen. Age may be a possible factor in limiting the degree of immunologic response of the infant, but more important is the fact that the passively transferred immunity received by the infant from its mother definitely inhibits the development of active immunity so long as passively transferred immune bodies are present. Passive immunity not only interferes with the development and maintenance of high antibody titers, but also tends to inhibit the development of the capacity to respond to secondary stimulation. This effect is most noticeable in infants immunized before the age of 3 months but is absent by 6 months. Therefore, additional efforts are being made to determine the optimum time for the administration of recall or booster doses in order to maintain high levels of immunity.

Too often stress is placed on providing the highest possible level of immunity to each disease with a good deal less attention paid to the number of injections required to produce this high level. As a result, in some of the reports discussing immunization routines one finds that infants are being given injections for indefinite periods, beginning in the first few weeks of life and continuing for every visit during the first year. Many of the reported series were collected in welfare stations and institutionalized groups where reception of such offerings is somewhat different than obtains in private practice. With full regard for the public health value of immunizations, but with due consideration for the infant, we must compromise on a routine which will assure adequate prophylaxis without unnecessary strain on the infant. Briefly, our goal would be to provide maximum early protection with a minimum number of injections.

PERTUSSIS

Immunization against whooping cough is a relative newcomer to the field of routine immunizations and has the doubtful distinction of being the least effective. It has also caused most of the unfavorable reactions. Modification of the old saline suspension of killed bacteria by precipitation with alum and by combining it with other antigens has improved its efficacy and lessened its unpleasant side-effects, but pertussis immunization remains a major problem.

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† Address delivered before the Twenty-second Annual Scientific Assembly of the Medical Society of the District of Columbia, October 3, 1951.

Because the bulk of pertussis mortality occurs prior to the age of 7 months, and because pertussis antigen until recently has rarely been given prior to the age of 6 months, most interest has been displayed in earlier use of the vaccine, even as early as the neonatal period. The success of pertussis immunization is measured clinically by apparent protection from disease and lack of unpleasant side-reactions, and in the laboratory by the agglutination response. Agglutinin titers of 1:320 after active immunization appear to be associated with clinical immunity, although there is no evidence that the agglutination reaction plays any part in the immunity mechanism, or even that the reaction occurs at all in vivo. The in vitro result must always be checked against the actual performance of the vaccine in vivo. A skin test was also developed as an aid in determining immunity to pertussis, a special pertussis agglutinogen being used. Results with this material have been equivocal, and it has not been released as a commercial skin test antigen.

Experiments indicate that 3 or even 2 doses of alum-precipitated or aluminum hydroxide-absorbed pertussis vaccine, when administered at monthly intervals beginning as early as the first week of life, will produce agglutination responses in more than 60 per cent of infants. However, in only half of these are titers up to the 1:320 level, supposedly consonant with clinical immunity. When the injections are begun at 3 months of age, up to 60 per cent show so-called protective titers.

The efficacy of the vaccine should not be judged on these figures alone. On the basis of information obtained from immunized groups subject to household exposure it appears that titers of 1:320 were associated with complete protection, while in children with titers of 1:160 or less the attack rate was 33 per cent. Thus in the group inoculated under the age of 3 months one may estimate that regardless of titer only 25 per cent of the exposed infants will develop pertussis, whereas among non-immunized groups with negative titers the attack rate after household exposure is from 75 to 90 per cent. This indicates significant protection in spite of the degree of agglutination response. Therefore, regardless of how early the vaccine is administered, some beneficial effects are to be expected at a time when they are most needed. The age at which the vaccine is first given must be decided on the basis of local necessity or desirability.

The dosage required to give adequate immunity under ordinary conditions depends upon the type of vaccine used. In the old saline type at least 100 billion organisms were required. With the use of alum preparations, especially those in combination with other antigens, immunity is more easily attained. There is no complete agreement as to optimum dosage, but a total of 40 to 60 billion organisms is usually considered adequate. Since there appears to be a direct relationship between the size of the dose and the number and extent of reactions which occur, one must compare the toxicity which may result from higher doses with the failures which may result from smaller quantities. Booster doses of pertussis vaccine are required at the time of known exposure and at 2- to 3-year intervals. A saline suspension of 10 billion pertussis organisms is more suitable for a recall dose at the time of exposure.

Reactions to pertussis vaccine, other than local reactions to be discussed later, have consisted primarily of fever of varying severity and duration. Temperatures of 104° F. or more are not uncommon with the saline suspension. Although rare, true encephalopathy has been reported following pertussis immunization and has been severe enough to produce permanent neurologic sequelae or death. As pointed out previously, the newer vaccines seem to have lessened the threat of such complications considerably. There is definite agreement that pertussis vaccine in any form should be given with caution to any child with a history of convulsions and should not be administered to a child with active infection. In doubtful cases it is appropriate to reduce the dosage and increase the number of injections until the effect of the vaccine can be ascertained.

Diphtheria

There is fairly general agreement that alum-precipitated or aluminum hydroxide-adsorbed toxoids are ideal in active immunization against diphtheria. Some dissenters believe that no type of alum toxoid should be used and prefer to employ the less effective fluid toxoid, giving extra doses. Although an extraneous or foreign material is introduced, its principal effect seems to be to delay absorption of the toxoid and prolong the antigenic stimulus, creating higher levels of immunity. The use of diphtheria toxoid in combination with other antigens (usually tetanus toxoid and/or pertussis vaccine) appears to enhance the antigenic potency of each.

Diphtheria toxoid has been used most often beginning at or after the age of 6 months, at a time when the immunity mechanism is entirely adequate. It is now evident that a satisfactory immune response is obtained when the toxoid is administered in the usual fashion beginning at the age of 3 or 4 months, and such a routine has now become common practice. Some response may be obtained when diphtheria prophylaxis is completed during the first 3 months of life, although there is interference from passively transferred immunity. As noted above, immune response is greater when diphtheria toxoid is combined with another antigen, such as pertussis.

A newer type of alum toxoid, designated as purogenated, is now in general use. This is a toxoid in which extraneous nitrogenous material is precipitated with methanol. It is claimed that this procedure removes over 99 per cent of such unnecessary nitrogen and thereby allows for the use of much less alum than was formerly required for precipitation. This, in turn, tends to make the product less likely to cause local reactions. These reactions will be discussed in detail in conjunction with the discussion of combined antigens.

The Schick test, for years used as the standard for determining the presence or absence of diphtheria immunity, will point out the occasional child who has not developed a protective titer of antitoxin. Some doubt has been cast upon the ability of a negative Shick test to indicate a truly protective level of antibody, but with the disqualification of the pertussis agglutinogen skin test, the Schick test is the only means available to the clinician which gives any evidence of the ability of the individual to respond properly to an antigenic stimulus. Once this fact has been established, the Schick test may be eliminated in favor of booster or recall doses.

Cellular immunity to diphtheria, once established, may remain for many years, but it is insufficient to furnish protection to the individual unless it is stimulated at intervals to increase the amount of circulating antibody. There is general agreement that the first recall dose should be given 1 year after completion of the basic series. After this, repetition every 2 to 4 years is recommended.

Tetanus

In general, the statements made with regard to diphtheria hold true for immunization against tetanus. As a matter of fact, the 2 are so often used in combination that it is almost impossible to obtain data on immunization against tetanus alone. Although protection against tetanus has proven its value many times over in both military and civilian situations, it was somewhat slowly accepted as a standard immunizing agent in pediatrics. Now that it is so often and so easily combined with the other common antigens there seems to be no valid excuse for its omission. Most important to remember is that in the majority of cases of tetanus in children one cannot elicit a history of recent injury, or else the injury was so trivial that no thought was given to the necessity of giving either antitoxin or a recall dose of tetanus toxoid. For this reason, if for no other, it is desirable to obtain and maintain a high level of tetanus immunity. To this end booster doses are recommended at least every 3 years. Routine boosters may be given with alum toxoids, but boosters at the time of injury should be with the more rapidly absorbed fluid toxoid which gives a more prompt antibody response.

Once basic immunity to tetanus has been established why should not a tetanus infection itself be sufficient to furnish enough toxin to act as an antigenic stimulus for additional protection? Although logical on theoretical grounds the belief has no basis in fact. This is amply demonstrated by the evidence that the patient just recovered from tetanus fails to respond to the recall dose of tetanus toxoid as does the person who has been actively immunized.

At this point mention should be made of passive prophylaxis against tetanus in the absence of previous active immunization. From previous experience it is apparent that the former dose of 1,500 units of tetanus antitoxin is too small for adequate protection. It is suggested that the initial dose be at least 5,000 units and preferably 10,000 units, depending upon the location, nature and severity of the wound. In addition, there is justification in some instances for repeating the injection, although protective levels of antitoxin may circulate for several days.

In some cases in which injury necessitates prophylaxis against tetanus, it may be discovered that active immunization has been given so long ago that it is doubtful that cellular immunity has been maintained, or there may be some question as to the adequacy of the original series. In these situations or where the nature of the wound makes it especially dangerous fluid toxoid and full doses of antitoxin should be used. If this combination is employed, it is probable that as long as significant amounts of antitoxin are present in the circulation the effect of the recall dose will be depressed or delayed.

Combined Immunizations

As mentioned earlier, one of the prime problems in immunizing infants is to obtain some combination of antigens which will give adequate immunity and at the same time reduce the number of injections required. A long step in the right direction was the development of a mixture of diphtheria and tetanus toxoids and pertussis vaccine. Here in one mixture are the 3 important materials for immunizing the infant and young child. The combination is available in fluid form as well as in the alum-precipitated and aluminum hydroxide-adsorbed varieties and in the newer purogenated forms. Every one of the latter is recommended for routine use in infants and children.

The combined antigens may be begun as early as 3 months of age with results which differ little with those obtained when the same material is administered beginning at the age of 6 months. Reactions also differ only slightly in these 2 age groups. In those cases in which it is desirable to secure protection against pertussis as early as possible, this may be done with 2 doses of alum-precipitated triple toxoid, given at intervals of 4 weeks and beginning at the age of 4 to 8 weeks. Although this may fail to produce adequate protection against diphtheria, this can be assured by giving the third dose of triple toxoid at 20 to 24 weeks of age. Such a program has the advantage of early protection against pertussis with eventual adequate protection against both diphtheria and tetanus. Also, the triple combination has helped to solve the problem of booster doses, since a single injection of the combined vaccine serves as an adequate booster for all components of the antigen when given to persons previously immunized to all 3 components.

Local reactions to combined fluid toxoids have usually been slight and transient, but general reactions to fluid antigens are occasionally severe. There may be considerable fever, malaise, and even convulsions and encephalopathies, as seen following pertussis vaccine. With the development of the precipitated antigens, systemic reactions have been decreased, apparently due to slower absorption in the system. The local reactions, although fewer than with fluid toxoids, have been more severe. The usual local reaction consists of the development of a small nodule or alum cyst at the site of injection. In some instances this nodule may persist for weeks before disappearing; at other times the cyst may rupture and drain, leaving a small scar. Occasionally incision and drainage of the fluctuant area may be required. These alum abscesses were fairly common with the earlier precipitated preparations, but with further purification and concentration they are met with much less frequently.

The method of injection is an important factor in the development of these abscesses. A true subcutaneous or intramuscular injection will rarely be followed by a local reaction other than transient redness. If any part of the material is introduced intracutaneously, alum abscess is more likely to occur. The larger doses used before the concentrated materials were available also contributed to the development of local reactions. Clearing the needle with a bit of air to avoid leaving a track of toxoid through the skin may be helpful. I have never found it necessary to change needles before injecting the toxoid in order to use one free of alum, nor do I inject the material distally as is occasionally recommended. The injections are most easily and conveniently given in the triceps area, but the buttocks may be used provided the injection is given deep enough. The skin over the triceps area is relatively insensitive and the muscle mass smaller and less used, making this a more suitable area for injection than the area of the deltoid. In several thousand injections of the alum-precipitated purogenated toxoids administered in the past 3½ years I have not encountered a single abscess and only an occasional cyst which has disappeared spontaneously.

Within the past few months a new and most important problem has risen with respect to complications of immunizing injection. Experiences with poliomyelitis in England and Australia, coupled with similar observations in the United States (notably in the Minneapolis epidemic of 1946) have indicated a possible connection between the site of injection of immunizing and therapeutic materials and the location of paralysis in certain patients with poliomyelitis. In substance, the published evidence indicates that:

1. Recent injections, given within 4 weeks of the onset of poliomyelitis, may be a factor in conditioning the location of paralysis if paralysis is to result from the attack.
2. Antigen injection may be a factor in tipping the balance toward paralysis in a case which might otherwise be nonparalytic.
3. There is no evidence of any relationship to any particular antigen injected.
4. The immunized child is no more susceptible to poliomyelitis or paralysis from poliomyelitis than is the non-immunized child after the first month following inoculation.
5. The danger is apparently significant only during times of increased prevalence of poliomyelitis.

To date no evidence is available to indicate how the antigen injection may operate to aid in the development of paralysis. It has been assumed by many that poliomyelitis was acquired separately and that the injection simply served to increase the danger of paralysis in the limb used for injection. One competent observer, on the contrary, has suggested that in most of the reported cases the onset of paralysis after antigen injection has corresponded within certain limits to what is known of the incubation period of poliomyelitis, and believes that possibly the poliomyelitis virus is introduced locally at the time of inoculation into the superficial nerves. If this were true the incubation period should be shorter when the injection is given in the arm as compared to administration into the lower extremity. This difference was evident in one series analyzed, where the average incubation period (time between injection and onset of paralysis) was 11.2 days for inoculations given in the arm and 17.7 days for inoculations given in the lower extremity.

As mentioned previously, many injection technics are employed and there is considerable variation in the manner in which needles and syringes are sterilized, ranging from the use of the autoclave to the often hasty boiling of the syringe in the home. Various types of skin antisepsis are used, needles may be from $\frac{3}{8}$ to 1 inch in length, and the injection may be given subcutaneously, intramuscularly, or (inadvertently) intracutaneously. Therefore, it becomes well nigh impossible to assess the role of injection in introducing the virus. It would seem logical to assume that the less trauma inflicted by the injection the less likely would damage result to muscles or nerves which might predispose to later localization of the virus, if such is a factor in production of paralysis.

A conservative viewpoint of the present problem may be summed up as follows:

1. Syringes and needles used for all types of inoculations should be sterilized by autoclaving or, if this is impractical, by boiling for 20 minutes.
2. Primary immunization against diphtheria, tetanus, and pertussis may be given at any age when poliomyelitis is not prevalent. During times of increased incidence these primary injections might well be limited to the first 6 months of life.
3. Routine booster injections should not be given when poliomyelitis is prevalent unless, in the opinion of the physician, there is danger of acquiring these infections in the absence of a booster dose.
4. Immunizations of all types may be given during epidemics of such diseases, or to persons leaving the country, as required by law or international health regulations.
5. There is no contraindication to insulin therapy and desensitization against hay fever, asthma, and other allergic diseases.
6. Injections of antibiotics and other therapeutic agents should be given whenever indicated clinically.

SMALLPOX

Smallpox vaccination should be performed during the first year of life, since at this age complications are infrequent. It is perhaps advantageous to complete tetanus immunization prior to vaccination in order to obviate the remote possibility of the development of tetanus as a complication. It is best to avoid the procedure in the summer months because of the prevalence of heat rashes and other skin irritations. Revaccination should be performed every 5 to 7 years.

The calf lymph virus is introduced by the multiple pressure method, and the site of inoculation is generally the upper left arm at about the point of insertion of the deltoid muscle, the skin having previously been cleaned either with ether or acetone. Although it is thought that the use of the thigh for vaccination predisposes to secondary infection and larger scars, there is no particular contraindication to vaccination almost anywhere on the body.

The vaccination vesicle should be left exposed but may be covered by a light, loose dressing. The dressing is most valuable when the vaccination is performed on the thigh, since it protects the vesicle against rubbing by the diaper or other underclothing. A tough eschar may be formed by painting the vesicle as soon as it is visible with a 3 per cent solution of picric acid in alcohol. Several applications may be required, but the material should be used in moderation since picric acid may cause its own vesiculation if used too heavily.

With a properly performed vaccination one should obtain either a primary vaccinia, an accelerated "take," or an early or immediate reaction. Absence of any reaction at the site of inoculation generally indicates that the vaccine virus was inactive at the time of its use.

Eczema and other generalized skin eruptions in the patient or in a member of the household are a definite contraindication to vaccination. The generalized vaccinia which may result is a potentially fatal complication and is still seen regularly on the wards of children's hospitals.

TYPHOID

Typhoid vaccine is not normally included in routine immunization procedures, but is given only when indication exists, either because of specific local conditions or the necessity of travel in endemic areas. The standard triple typhoid vaccine is used, and children receive a fourth to a half the adult dose. Boosters are required every 3 years to maintain effectiveness.

INFLUENZA

Influenza virus vaccine has been used in several experimental studies in the past few years with at least encouraging results. One difficulty in the use of influenza vaccine is the occasional appearance of an epidemic due to an antigenically different strain from those present in available commercial vaccines. Also, protection against Type B influenza afforded by the vaccine is better than that against Type A infections. Therefore, the vaccine is best used when it is known that an epidemic is in progress and should not be recommended for routine use.

The adult dose of the vaccine is a single injection of 1 c.c. Children over 6 years of age may receive the adult dose; those under 6 years are given 0.5 c.c. The amount may be given in a single dose or in 2 injections 3 to 7 days apart. The immunity conferred reaches its peak within 3 weeks, and then tends to decrease somewhat, although adequate protection is probably present for as long as 6 to 9 months. The vaccine must be repeated each year in order to maintain effectiveness. It is not clear to what extent these additional injections act as recall or stimulating doses.

Influenza vaccine has been responsible for occasional systemic reactions, largely febrile in nature, though possibly resembling a mild attack of the disease. These reactions are directly related to the quantity of virus given, and, therefore, if reactions are suspected or feared, the divided dose technic should be used. Since the vaccine is prepared from infected chick allantoic fluid there is always the possibility of its injection producing an allergic reaction in the egg-sensitive individual. A proper history would seem to be sufficient safeguard in most instances, but where doubt exists a skin sensitivity test may be performed, 0.02 c.c. of a 1:10 dilution of the vaccine being used. Use of the vaccine should be omitted if there is any evidence of sensitivity.

SCARLET FEVER

Immunization against scarlet fever is still being used to some extent, but the rationale of its employment is open to question. The point most often raised is in relation to the role of the streptococcus toxin versus the effects of the streptococcus itself in scarlet fever and streptococcus sore throat without a rash. If the immunity is effective only against the toxin, a false sense of security is developed which is unwarranted in view of the many difficulties encountered with the purely bacterial phases of streptococcal infections. In addition, Dick toxin, which is still the material of choice for immunization, produces many severe reactions. The effectiveness of the antibiotics would seem to eliminate the last need for protection against scarlet fever.

TUBERCULOSIS

I cannot close without brief mention of one highly controversial immunologic procedure, the use of BCG vaccine in the control of tuberculosis.

BCG vaccine (bacillus of Calmette and Guérin) is an attenuated viable strain of bovine tubercle bacillus capable of producing a completely benign primary infection when properly inoculated into the human. Its primary purpose is to prevent the development of naturally occurring primary infections, especially among those groups of individuals most apt to be exposed. In addition it eliminates the possibility of development of the complications of such primary infections, including tuberculous meningitis, miliary tuberculosis, and tuberculous pneumonia. On the other hand, the patient so protected is rendered allergic or hypersensitive to tuberculoprotein and, like the person recovering from a natural primary infection, is liable to the hazards of the reinfection type of tuberculosis. There remains the question of which is the greater danger, the occurrence of a naturally acquired primary infection in the tuberculin-negative individual, or the hazard from reinfection forms which can only appear after the development of tuberculin sensitivity. Although it is impossible to answer this question accurately, the impression is growing that among infants, children, and young adults the naturally acquired primary infection is much the greater menace.

At the present time the vaccine is being used only under controlled conditions in groups occupationally exposed, or in selected population groups with high tuberculosis morbidity and mortality rates. There is much opposition to the vaccine from many authorities on tuberculosis, and the final decision as to its value will not be known for some time.

SUMMARY

In summary, the following immunization schedules are recommended.

IMMUNIZATION SCHEDULES

I. Immunization program recommended by the Subcommittee on Child Welfare of The Medical Society of the District of Columbia

3 Months	0.5 c.c. Alum-precipitated or aluminum hydroxide-adsorbed diphtheria and tetanus toxoids with pertussis vaccine, 30 billion organisms/c.c.
4 Months	0.5 c.c. Triple toxoid as above
5 Months	0.5 c.c. Triple toxoid as above
*6 Months	0.5 c.c. Triple toxoid as above
7–12 Months	Smallpox vaccination
12 Months	Schick test and tuberculin test
18 Months	0.5 c.c. Triple toxoid, booster, as above. Additional boosters at 4 and 6 years.

II. Routine for Schick-positive mothers (adapted from Miller[1])

4–8 Weeks	0.5 c.c. Triple toxoid as above
8–12 Weeks	0.5 c.c. Triple toxoid as above
20–24 Weeks	0.5 c.c. Triple toxoid as above
6–12 Months	Smallpox vaccination
12 Months	Schick test and tuberculin test
18 Months	0.5 c.c. Triple toxoid, booster, as above. Additional boosters at 4 and 7 years.

III. Routine for Schick-negative mothers (adapted from Miller[1])

1 Month	0.5 c.c. Alum-precipitated or aluminum hydroxide-adsorbed pertussis vaccine
2 Months	0.5 c.c. Pertussis vaccine, as above
5 Months	0.5 c.c. Triple toxoid as above
7 Months	0.5 c.c. Triple toxoid as above
10 Months	0.5 c.c. Triple toxoid as above
11–16 Months	Smallpox vaccination, tuberculin test and Schick test
18 Months	0.5 c.c. Triple toxoid, booster, as above. Additional boosters at 4 and 7 years.

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* This fourth dose is not recommended by the Committee on Immunizations of The American Academy of Pediatrics.

[1] MILLER, J. J., JR., AND OTHERS: Immunology in practice of pediatrics. Pediatrics, 1951, **7**, 118.

MANAGEMENT OF HEMORRHAGE IN THE NOSE AND THROAT

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THE management of hemorrhage in the nose and throat should follow a regular, complete régime of correct local therapy combined with fully adequate systemic measures to control and insure maintenance of hemostasis. Postoperative hemorrhage following tonsillectomy is not infrequent. Nasal hemorrhage occurs in many physiologic and pathologic states. Inflammation, trauma, circulatory disease, acute infectious fevers, blood dyscrasias, vitamin C deficiency, and new growths may manifest themselves by nasal hemorrhage. The mechanism of epistaxis is erosion of a superficial arteriole. When a venule breaks, blood soon clots and nasal hemorrhage is not observed. The anterior cartilaginous septum, Kiesselbach's area, is the site of most bleeding in the nose. Repeated septal bleeding leads to crusting, loss of mucosa, and perforation of cartilage.

LOCAL THERAPY

Visualization of the source of hemorrhage is essential. This necessitates proper lighting, which is best supplied by a head mirror or head light. Both hands are thus left free to manage the local problem. A bloodless field can be obtained by the aid of a suction machine with appropriate tip. For pain, 2 per cent pontocaine applied on cotton is indicated. Thus discomfort during local procedures largely will be eliminated. Neosynephrine 1:100 or adrenalin 1:1000 on a cotton sponge applied to the bleeding area will induce prompt clotting. If hemostasis is effected without difficulty, prompt cauterization will do much to eliminate recurrence. Electrocauterization is as satisfactory as the use of silver nitrate or trichloracetic acid. When bleeding in the nose cannot be controlled, the use of vaseline gauze or oxidized cellulose may be of value. If hemorrhage is severe a postnasal pack is used. The pack should be cut and shaped according to the size of the nasopharynx. An ill-fitting pack will not stay in place, and blood will trickle down the throat. After the pack is shaped, a strong silk suture is tied around it, leaving 2 long ends. Next a catheter is inserted in the nose and its tip passed through the nasopharynx and out into the mouth. One end of the suture attached to the pack is tied to the catheter tip. The catheter and tie are drawn out of the nose. The pack is fitted tightly into place in the nasopharynx. The pack's ties are secured over a cotton roll placed on the upper lip. An anterior nasal pack can be inserted through the nasal entrance to close one side of the nose completely. An expansible rubber catheter may be substituted for the posterior gauze pack. Restlessness and the increased physical activity accompanying hemorrhage make the possibility of recurrence greater. If intranasal and systemic measures do not stop bleeding, one of the large posterior nasal vessels may have to be ligated. In order to ligate a postnasal vessel, submucous resection usually must be done. If the septum has a large defect, it should be corrected promptly. Occasionally it is necessary to occlude the external carotid or the internal maxillary artery. In case of great emergency the blood flow to the head can be reduced by direct pressure on both external carotid arteries until a sponge can be placed over the area of hemorrhage. After epistaxis is controlled, its cause should be determined and treated promptly in order to prevent recurrence.

In bleeding following tonsillectomy it is desirable to avoid the use of a second general anesthetic. Topical or local anesthesia will eliminate pain during local therapy. A medicated sponge applied to a tonsillar fossa should be left in place long enough to allow clotting. If bleeding is slight a gelatin sponge may be placed over the area of hemorrhage and left until it dissolves. It cannot be too strongly emphasized that gentleness is most important in dealing with a patient with nasopharyngeal bleeding. It is surprising how much work one can do on a very small child if he gains the patient's confidence through gentleness.

Systemic Therapy

Adequate systemic therapy is of paramount importance in the control of hemorrhage in the nose and throat. Activity should be limited for at least 24 hours. Bed rest is not indicated when bleeding is slight and cauterization effective. Sedation is important to combat anxiety and must be administered in a form which will be promptly assimilated. Intramuscular administration is preferable to the giving of a tablet, which is painful when swallowed. Moderate doses of a barbiturate in small children are useful. Morphine and atropine are an excellent combination or ad ults, as well as demerol. Synthetic vitamin K helps control hemorrhage in the nasopharynx if the prothrombin time is found to be prolonged. If bleeding is great an initial dose of 72 mg. of menadione sodium bisulfite intravenously will aid in controlling it. Ten milligrams of synthetic vitamin K intramuscularly every 4 hours is a deterrent to recurrent hemorrhage. Small doses of vitamin K or large doses given at irregular intervals are not satisfactory. In cases of profound hemorrhage, whole blood is given immediately upon completion of local therapy.

Summary

Local management of hemorrhage in the nose consists of obtaining a bloodless field and treating the area of hemorrhage at once by cauterization if possible; otherwise nasal packs are used to stop bleeding. Cauterization is used to close a small vessel in the throat. Larger vessels must usually be ligated under local anesthesia. Immediately following local therapy a regular régime of sedation, vitamin K and other systemic measures as outlined must be instituted to prevent further hemorrhage. Recurrent bleeding may be prevented if the physician remains with the patient long enough to see that supportive measures have been instituted.

PILONIDAL CYSTS[*][†]

Review of 115 Cases

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FIVE years ago I presented before this staff meeting a report on all the pilonidal cysts done in Doctors Hospital between March 5, 1941 and March 5, 1946. This present report covers the period from March 1946 to March 1951. Both of these reports required considerable coöperation between the Record Room, represented by Miss Holt, various surgeons, and myself. I want to express my thanks to all those who so kindly lent their aid to this study.

At the conclusion of the previous report I made the following observations and recommendations:

1. The care of a pilonidal cyst is very apt to be a long-drawnout affair.
2. Some method of primary closure cuts down on the period of convalescence. Special attention was at that time drawn to the method by which the gluteus fascia was separated from the sacrum and resutured in the midline.
3. The length of stay in the hospital does not seem to materially influence the time it takes the wound after excision of the cyst to heal.
4. The number of office visits is, on the whole, less with primary closure than with drainage.
5. The removal of a pilonidal cyst can be safely combined with other operative procedures on carefully selected cases.

Hospital Incidence

The pilonidal cyst occupies a small percentage of the total hospital admissions, there being 210 pilonidal cyst admissions out of about 110,000 hospital admissions, or about 0.2 per cent. However, these patients with their illness are quite uncomfortable, inconvenienced, and at times disabled for a long time. At present there is still a fairly high recurrence rate, there being operations on 10 recurrent pilonidal cysts in this series. We are endeavoring to find and advocate a method of doing them which will reduce this incidence of recurrence. Many of these patients have a more than average number of office visits. Methods which reduce these are certainly economically sound.

Number of Patients

The present study consisted of all the pilonidal cysts done from March, 1946 through March, 1951 in Doctors Hospital. These operations totaled 115 on 113 patients. There were 43 surgeons who operated in this series. Breaking down the work done by the various surgeons, 20 physicians did 1 pilonidal cyst each on 20 patients, 10 did 2 each, 5 did 3 each, 2 did 4 each, 3 did 5 each, 1 did 8, 1 did 9, and 1 did 20.

From March, 1946 to January 1, 1947, 21 pilonidal cysts were done. In 1947, 23 pilonidal cysts were treated surgically; in 1948, 17, in 1949, 22, in 1950, 29, and from January 1, 1951 to March 15, 1951, 3.

History of the Cases

A history was available on the chart on all 115 of these patients. From this we glean the following information: There were 14 identifiable chief complaints. In 58, or 50 per cent of the patients, drainage was one of the chief complaints. The next most common chief complaint was pain, occurring in 36, or 31.5 per cent.

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[*] From the Departments of Surgery of Doctors Hospital and the George Washington University School of Medicine.

[†] Read before the meeting of the Surgical Staff of Doctors Hospital, June 18, 1951.

Eighteen patients, or 15.6 per cent, complained of tenderness, and 18 patients (15.6 per cent) complained of a lump. Seventeen patients, or 14.7 per cent, stated on admission that they had a cyst at the base of the spine. There were 8 patients, or 6.8 per cent, who had a definite history of injury at the base of the spine. Six patients were recorded as having more than 1 incision and drainage. The probability is that a more searching study of the history would reveal that more than this number had had more than 1 incision and drainage of a cyst before consenting to remedial surgery.

Four patients were symptomless, and their pilonidal cysts were discovered on examination and operation advised and done. This is 3½ per cent of the total. Two patients complained of itching or pruritus in the region of the pilonidal cyst. One each complained of discomfort on sitting, backache, and difficulty on voiding. There was 1 painful pilonidal scar. This should not be considered a recurrence of the cyst but one of the defects of the operation. It is my belief that more than this 1 patient in the series had a painful scar for a considerable length of time, although this is the only 1 recorded as having a removal for this reason.

Ten of these operations, or 8.7 per cent, were done for recurrence of a pilonidal cyst. One of these had 2 operations in this hospital a year apart. Another had had an operation 7 years previously in this hospital and had a recurrence on this admission. The other 8 had presumably been operated upon elsewhere and had come to this hospital for operative removal of their recurrent pilonidal cyst. Eight of these patients had their second operation for a recurrent pilonidal cyst done in this hospital. One of these patients had his fourth operation for recurrent pilonidal cyst done during this series. Another had his third operation done because of recurrence.

ANALYSIS OF RECURRENCES

A study of the history in the cases of recurrent pilonidal cysts shows that:

1. One patient was operated on in 1946, 1948, and in 1950. He had an excision and packing. It took 56 days and 16 office visits for healing, and there has been no further recurrence.

2. A recurrent pilonidal cyst which had been opened 4 times in 6 years was removed and closed with a drain. It took 15 days and 3 office visits for healing.

3. A man aged 24 had trouble with pilonidal pain in 1944. The first removal was in January, 1945, the second in March, 1945, the third in August, 1945, and the fourth in the present series in November, 1950. He had the skin edges sutured to the fascia. It took 73 days and 12 office visits to heal.

4. A fourth patient had his cyst excised 2 times in 1942, and it recurred in 1949. The cyst was excised and the skin edges sutured to the fascia. It took 26 days and 5 office visits for healing.

5. Another man had an operation on his cyst 3 months before the present excision, with partial suture and packing. It took 36 days and 8 office visits for healing.

6. A woman had a removal in 1946 with discharge off and on afterwards. The cyst was removed in 1949 and the gluteus fascia approximated in the midline. It took 76 days and 3 office visits for healing.

7. A man had recurrent drainage since an operation in 1934. The cyst was removed and packed open. Healing took place in 131 days and 17 office visits.

8. A woman had an original operation in 1940, with recurrence in 1947. The cyst was then removed and the wound packed open. She was well after 43 days and 5 office visits.

9. A man had his first operation in 1942 with a primary closure. The cyst recurred in 1946 and was removed and left open in 1947. It took 129 days and 16 office visits for healing.

10. A woman had her pilonidal cyst excised in 1939, with recurrence in 1945 and removal in 1946 with primary suture with a drain. It took 17 days and 3 office visits for healing.

AGE

A study of the age of the patients done in this series showed that the youngest were 3 girls aged 15. The oldest was a woman aged 65. By decades there were 19 patients in the second decade, 61 in the third, 26 in the fourth, 6 in the fifth, and 2 in the sixth. There was 1 in the seventh decade. The average age was 27.1 years. This compares with an average age in the previous series of 28.1 based on the known ages of 92 patients.

SEX

A study of the sex of these patients shows that 75 were males and 40 females. This compares with 60 males in the previous series and 35 females. From 210 cases in which the sex was known in both of these series there were 135 or 64.5 per cent males and 75 or 35.5 per cent females.

TYPES OF OPERATIONS

In the previous study we soon found that there were 9 well identifiable methods of treating the pilonidal cyst. In the present study 8 methods could be identified. The various methods of treating the pilonidal cyst are briefly enumerated as follows:

1. Simple excision and packing (13 cases).
2. Partial excision and curettage of the tract. (This method did not appear in the series from 1946 to 1951.)
3. Cyst excised and sutured with a Penrose drain (3 cases). (This is a form of primary closure.)
4. Cyst excised and the edges sutured to the fascia (33 cases).
5. Cyst excised and the wound closed (46 cases).
6. Excision of the cyst, partial suture and packing (4 cases).
7. Excision of the cyst, edges undercut and sutured (1 case).
8. Cyst excised, the gluteus fascia divided and sutured in the midline (12 cases). Those sutured with or without a drain were included in this method.
9. Simple incision and drainage (3 cases).

A great many of the cysts in this present series had had incision and drainage in the doctor's office shortly before being admitted to the hospital. Those done in the doctor's office were not included in the operations done in this series. The incisions and drainages done in the hospital were included in the operations done in this series. The type of excision could not be made out from the operative record in 2 of the cases. The surgeons supplied this information.

There was 1 recurrence in group 4. Of the 3 patients who had simple incision and drainage, 1 was classified as a recurrence in this series, and the cyst was removed 1 year later. The other 2 had no further trouble during the period covered by this study.

CONCOMITANT SURGICAL PROCEDURES

Eleven of these patients or 9.6 per cent had other operations done at the same time that their pilonidal cyst was removed. Three of these patients had a hemorrhoidectomy. One had an anal fissure removed, 1 had a sebaceous cyst removed from the face, another had an appendectomy and removal of a thrombosed hemorrhoid, 2 had anal fistulae excised, 1 had a lipoma removed from the leg, 1 had the labia minora removed, and 1 had cauterization of the cervix. None of these operations seemed to seriously complicate the pilonidal cyst removal as could be judged from the chart.

ANESTHESIA

Anesthesia records were given on 114 of the 115 charts. The most popular anesthetic used (92 patients) was sodium pentothal intravenously supplemented by ethylene-oxygen gas mixture. This was used in 80 per cent of the total number of anesthetics. Spinal anesthesia was used in 7 of these patients or 6.1 per cent.

Spinal anesthesia supplemented by sodium pentothal intravenously was used in 3 cases or 2.6 per cent. Ethylene and oxygen as a sole anesthetic agent was used in 3 patients or 2.6 per cent. Two patients each had avertin, sodium pentothal, gas, ether anesthesia, and sodium pentothal-gas curare anesthesia. One patient had her cyst removed and sutured primarily under 1 per cent novocaine. One patient had a pilonidal abscess opened under ethyl chloride locally. One patient had spinal anesthesia plus intravenous nembutal anesthesia.

ANTIBIOTICS

Antibiotics were not in use in the previous series. During this series antibiotics came into use, and in 1946 3 of the 21 patients or 14.2 per cent received them in one form or other. In 1947 5 of 23 cases or 21.6 per cent received antibiotics. In 1948 8 or 47 per cent of 17 cases received them. In 1949 8 or 36 per cent of 22 cases received them. In 1950 8 of 29 cases or 27.5 per cent received antibiotics. All 3 patients treated during the first 3 months of 1951 received antibiotics.

The most popular antibiotic was penicillin. Sulfadiazine was used. Tyrothrycin dressings were used on 1 patient in 1947, and streptomycin was used in 2 cases in 1950.

In the latter years of this study penicillin dosage was increased considerably over that in the early years. The percentage of patients receiving antibiotics, aside from 1946 and 1947 when they were fairly expensive, has not increased very much in the last 4 years. The antibiotics in most cases were used prophylactically to cut down on the incidence of postoperative wound infection, and I believe that, in the cases sutured in expectance of primary union, their use contributed to a successful outcome.

LENGTH OF HOSPITAL STAY

These 115 patients stayed in the hospital a total of 809 days, or an average of 7.07 days per patient. Breaking this down we see that no patient stayed only 1 day. Four patients stayed 2 days, 4 patients 3 days, 15 patients 4 days, 15 patients 5 days, 19 patients 6 days, 16 patients 7 days, 16 patients 8 days, 5 patients 9 days, 6 patients 10 days, 4 patients 11 days, 5 patients 14 days, 1 patient 17 days, and 1 patient 19 days.

Some of the most important findings in this study are summarized in table 1. In this chart is correlated the type of excision with several different factors. In this series of 115 patients there were 62 who had a primary closure of the pilonidal cyst. This was 54 per cent of the total in this series of 115. In the previous series of patients done from 1941 to 1946 only 30 per cent had a primary closure of the pilonidal cyst.

Correlated with the average hospital days we see that the eighth method of excision with the gluteus fascia divided and sutured in the midline had the longest hospital stay, an average of 8.9 days. The average hospital stay decreased in this order: partial suture and packing, excision and closure of the wound, excision and the edges sutured to the fascia, excision and the wound closed with a drain, simple excision and packing, excision and edges undercut and sutured, and incision and drainage. Incision and drainage had a surprising average of 4.3 days in the hospital.

The shortest hospital stay in this series was 2 days in the case of 1 of the patients who had simple excision and packing of the wound. The longest hospital stay in this series was 19 days and occurred in a case in which the cyst was excised and the edges of the wound sutured to the fascia.

The average days of convalescence were figured from the date the cyst was excised until the wound was reported healed by the surgeon in charge. This date was obtained from the surgeon by reference to his office records and was very willingly reported by all the surgeons who operated upon the patients in this series. The average days of convalescence were 66.8 for 11 cases of simple excision and packing. Of these the longest period was 131 days and the shortest

TABLE 1
Significant Data

1946–1951 TYPE OF EXCISION	TOTAL NUMBER OF PATIENTS	AVERAGE HOSPITAL DAYS	SHORTEST HOSPITAL STAY	LONGEST HOSPITAL STAY	AVERAGE DAYS OF CONVALESCENCE	LONGEST NUMBER OF DAYS TO HEAL	SHORTEST NUMBER OF DAYS TO HEAL	AVERAGE NUMBER OF OFFICE VISITS	GREATEST NUMBER OF OFFICE VISITS	LEAST NUMBER OF OFFICE VISITS	KNOWN RECURRENCES
1. Simple excision, packing	13	5.6	2	10	66.8 (11 cases)	131	36	11.3	18	2	0
2. Partial excision, curettage of tract	0	—	—	—	—	—	—	—	—	—	—
3. Cyst excised, sutured with a drain	3	6.3	5	8	16	21	12	3.75	4	3	0
4. Cyst excised, edges sutured to fascia	33	7.06	3	19	66.8 (29 cases)	333	17	8.5	63	2	1
5. Cyst excised, wound closed	46	7.13	2	17	41.2	201	7	4.8	16	1	0
6. Excision, partial suture and packing	4	7.75	5	14	54.3	76	36	10.3	13	8	0
7. Excision, edges undercut and sutured	1	5	5	5	43			3			0
8. Excision, gluteus fascia divided and sutured in midline	12	8.9	6	14	50.4 (11 cases)	254	15	5	25	1	0
9. Incision and drainage	3	4.3	4	5	60 (1 case)			20			1
(Primary closure in 62 or 54%) Total Number of Operations	115										
Penicillin-treated patients	Data on 32 of 34				63						

36 days. Of the 33 cases in which the cyst was excised and the edges sutured to the fascia there were data on 29 cases in which I calculated an average of 66.8 days of convalescence. This included the longest number of days to heal of 333 and the shortest of 17 done by this method. By excision with partial suture and packing there were 4 cases, with an average of 54.3 days from operation to complete healing. The longest period was 76 days and the shortest 36 days. With the method of excision and closure by dividing the gluteus fascia and suturing it in the midline there were 12 cases done in this manner. The average days of convalescence were 50.4, with the longest 254 days and the shortest 15. It took 43 days for the pilonidal cyst wound to heal when it was managed by excision with undercutting of the edges and primary suture. When the cyst was excised and the wound closed primarily, as was done in 46 cases in this series, the average days of convalescence were 41.2, the longest being 201 and the shortest 7. The best record in this series was on those in which the cyst was excised and sutured with a drain. This was done in 3 cases. The average days of convalescence were 16, with the longest 21 and the shortest 12.

From an economic point of view it is interesting to know the average number of office visits that each of these patients made. In the patients who had simple excision and packing the average office visits were 11.3, with the greatest 18 and the least 2. When the cyst was excised and sutured with a drain the average office visits were 3.75 with the greatest 4 and the least 3. When the cyst was excised and the edges sutured to the fascia the average office visits were 5, with the greatest number 63 and the least 2. When the cyst was excised and the wound closed the average office visits were 4.8, with the greatest 16 and the least 1. With the excision, partial suture and packing the office visits averaged 10.3, with the greatest 13 and the least 8. In the case of the cyst which had its edges undercut and sutured there were 3 office visits. In the most complicated method of treatment of these pilonidal cysts, namely, by gluteus fascia division and suture in the midline, the average office visits were 5, with 25 the greatest and 1 the least. The patient who was reported as healing after an incision and drainage had 20 office visits. One sees by examining these figures that the office visits necessary from excision to complete healing is much less in those types in which there is primary suture of the wound.

There are only 2 known recurrences in this group of 115 patients. One of these followed an incision and drainage and in my opinion was expected. The other was after the cyst was excised and the edges sutured to the fascia. This was picked up because he was operated upon the last time in this hospital by a different surgeon. The first surgeon had no knowledge of the recurrence.

Summary and Conclusions

There were no deaths in this series of 115 cases.

Recovery from a pilonidal cyst operation is apt to be a long-drawnout affair.

Primary closure is the method of choice in this order:

1. Suture with a drain
2. Primary suture after excision
3. Excision, gluteus maximus fascial dissection and suture in the midline. This method seemed more useful in the more complicated cases. In some cases the sutures were left in longer than the 7- to 10-day period.

Antibiotics should be used in cases in which infection is anticipated. They need not be used in all cases. The use of antibiotics could not be statistically proved to shorten the length of convalescence. Penicillin-treated patients took an average of 63 days to heal, which is longer than the average for most methods of closure.

The length of hospital stay does not seem to materially influence the time it takes the cyst to get well. Office visits are less numerous with primary closure.

Pilonidal cyst removal can safely be combined with other operative procedures in carefully selected cases.

Most important, recurrence seems to be less in this series with primary closure than with any open method. It may be that one of the reasons for recurrences is fascial or possibly bony infection with low-grade osteomyelitis or fascitis as a result of leaving the wound open.

Primary closure was done in 54 per cent or 62 of the 115 cases in this series and 30 per cent of the series from 1941 to 1946.

President's Page

SOCIETY AND THE PHYSICIAN

IX. The Physician and His Faith

Faith makes the world go. No one questions whether the tides will follow in regular sequence, whether the sun will come up, or whether the seasons will come in proper progression. We know they will. Nor do we often question whether a sound bank will honor our check, a good store allow us credit, or a properly certified note be paid. We have developed "faith" in these man-made institutions and they in us.

Faith in one's self is equally important. The self-confident man accomplishes much because he has the courage of his convictions. On the contrary, the person with an inferiority complex is unhappy and accomplishes little. He has no faith in himself, and in consequence has no faith in others, or vice versa. Self-faith is just as important to a well-run individual as faith in others is to a well-run world.

Somehow, though, faith in one's self is like pulling yourself up by your own bootstraps. It's impossible to accomplish without some help. Fortunately, there is available to those who wish, a higher intelligence and spirit, a God (called by many names, and believed in variously in different races and individuals), from whom we can expect help and encouragement, and to whom we can admit failure. It's rather satisfying to know that help is available, even when we don't think we need it.

The most useful and beloved physicians I know are men who have faith in themselves, in people about them, and in a higher source of power and information than themselves. I would have little faith in any physician who thought that he himself was the final authority.

Sir William Osler in "A Way of Life" urges, "Begin the day with Christ and His Prayer" (p. 37), and suggests that the Bible "will give you faith in your day" (p. 38). Quite a prescription from one of the medical immortals!

Conference on Medical Teaching Technics

SPONSORED BY

THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

Friday and Saturday, April 4 and 5, 1952

ALL SESSIONS IN THE MEDICAL SOCIETY'S BUILDING 1718 M STREET, N.W.

PROGRAM

FRIDAY MORNING, APRIL 4, 9:00 A.M.

"The Need for Teaching the Teachers"
William Parson, M.D.
Professor of Medicine, University of Virginia

"The Importance of Selling Knowledge"
W. C. Davison
Head, Department of Education, International Business Machines

"What to Write About and Where to Send It"
Morris Fishbein, M.D.
Chicago, Illinois

"Illustrations for Manuscripts"
Herman Van Cott
Chief, Illustrations Division, Armed Forces Institute of Pathology

FRIDAY AFTERNOON, APRIL 4, 2:00 P.M.

"Drawings for Lectures"
Richard H. ("Dick") Mansfield
Cartoonist, *Washington Evening Star*, creator of "Those Were the Happy Days"

"How to Prepare a Talk"
J. H. Henning
Head, Department of Speech, West Virginia University College of Arts and Sciences

"Lantern Slides for Lectures"
Tom Jones, M.D.
Professor of Medical and Dental Illustrations, University of Illinois

"Medical Motion Pictures"
Warren Sturgis
President, Sturgis-Grant Productions, New York City

"Building a Personal Library"
Harold Jeghers, M.D.
Professor of Medicine, Georgetown University School of Medicine

"Showmanship in Teaching"
Walter Freeman, M.D.
Professor of Neurology, George Washington University School of Medicine

SATURDAY MORNING, APRIL 5, 9:00 A.M.

PANEL ON INFORMAL MEETINGS

WALLACE M. YATER, M.D , *Moderator*
Director, Yater Clinic

PARTICIPANTS

THOMAS M. PEERY, M.D.
Director of Postgraduate Instruction, George Washington University School of Medicine

PAUL KIERNAN, M.D.
Associate Professor of Surgery, Georgetown University School of Medicine

W. PROCTOR HARVEY, M.D.
Instructor in Medicine, Georgetown University School of Medicine

E. T. LISANSKY, M.D.
University of Maryland, School of Medicine

"Medical Writing"
MORRIS FISHBEIN, M.D.
Chicago, Illinois

PANEL ON FORMAL MEETINGS

BRIAN BLADES, M.D., *Moderator*
Professor of Surgery, George Washington University School of Medicine

PARTICIPANTS

WALTER C. ALVAREZ, M.D.
Editor, *Modern Medicine*

JULIAN P. PRICE, M.D.
Editor, *Journal of the South Carolina Medical Association*

J. H. HENNING
Head, Department of Speech, West Virginia University College of Arts and Sciences

HUGH H. HUSSEY, M.D.
Associate Professor of Medicine, Georgetown University School of Medicine; Editor, GP

REGISTER NOW

The registration fee for the Conference is $10.00. Physicians who desire to participate should register not later than March 31. Mail your check to DR. HUGH H. HUSSEY, Chairman of the Committee on Medical Teaching Technics, 1718 M Street, N.W., Washington 6, D. C.

NOTE THE RED LETTER DAYS, APRIL 4 AND 5, ON YOUR CALENDAR

Editorials

PSYCHIATRY AND RELIGION

There are not a few signs that we are entering a new day in the relations of psychiatry and religion. On both sides of what seemed for a time a high, barbed-wire fence, a new respect is manifest for what takes place on the other side of the barrier.

In this connection the irenic influence of the highly popular writings of the late Rabbi Joshua Liebmann may be cited. The keen interest of many theological seminaries in psychiatric theory and practice and their prescription of clinical training for students preparing to enter the ministry has not been without a two-edged effect. Many psychologists and psychiatrists have found with Dr. Jung of Zurich that the problems of their patients are in the last resort religious, paralleling in character and structure those which throughout the centuries the Church has diagnosed and attempted to solve.

A concrete example, which was immensely stimulating to this writer, was the Ninth Adelynrood Conference on Theology in Action held at Newburyport, Massachusetts, last Labor Day week-end. The theme was "Faith, Its Theology and Psychology." Those participating were principally clergy, lay Church workers, social workers, psychologists, and psychiatrists. After four papers respectively by a theologian, a research associate in psychiatry, a psychiatry professor from a prominent medical school, and a pastoral counselor, all dealing with faith from some angle, there was a panel discussion. To the embarrassment of the theologian (who was the writer of this editorial), almost all the questions were directed at him. The other panelists joined in the general barrage. What was striking about the questions was the searching and sincere concern generally felt about the "how" of faith. *How is it* that one comes to believe?

Undoubtedly the psychological section of the Conference in question was exceptional. Its presence at that particular gathering is proof of this fact. Yet there is strong reason to believe that such a phenomenon expresses a trend: It is a straw showing the direction of the wind. Like all winds this one is from beyond conscious individual man. It is mysterious in origination. It is "of the Spirit." We can, however, as individual clergy and psychiatrists by our free will impart force to this wind. We can help it, by our humility, open-mindedness, and insight, to become a cleansing gale. If this happens, both our causes which have so much in common will benefit.

Psychiatry is a new science. (At least this is true as a general statement. A Yale anthropologist has recently opined that the oldest profession is not that of the proverbial expression but is the medicine man, and that the medicine man was a spiritual, not a physical healer—in short a psychiatrist!) In a brief period it has made remarkable strides. It has impressed itself profoundly upon the mentality of an age. It has influenced deeply not only medicine, but art, poetry, the novel, religion, and even ethics and the law. It has, however, encountered some obstacles. It has found that the territory which it had staked out as its own is vast and that the soul of man is an obstinately complicated proposition. Reacting with appropriate maturity to the firm realities that cannot be conjured out of existence, psychiatry is having sober second-thoughts. It is

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

abandoning the cocksureness and dogmatism which are not infrequently the accompaniment of quick success. It is settling down with becoming sobriety to the long pull.

Religion, by contrast, is a very old performer, and of late it has seemed to suffer from hardening of the arteries. In the modern period it has had a good many hard blows. Some of these were by fate or circumstance. Others were from inability or unwillingness to face facts. The resultant necessity of abrupt about-face has hurt the credit of religion and turned the feet of many into other paths. Yet the same irreducible conditions of life and death, love and hate, remain. Primitive man and modern man under the surface of convention and social habit are astonishingly alike. The challenge of ultimate frontiers has not altered. And many of the substitutes for faith in a meaningful and friendly universe have failed, leaving man's last estate worse than his first. Even granting that religion is the result of a neurosis, he would be a bold advocate who would contend that the mental and spiritual state of man in the twentieth century represents an improvement over the old malady. Be this as it may, religion is today showing signs of recovering its second wind. It is finding that it still meets human need. It is discovering anew its appeal to high and low, rich and poor, intellectual and simple. As it does so, moving in with a wide swing of time's never-resting pendulum, it is of paramount moment that it proceed with humility, vesting itself not with the phylacteries of senile arrogance but with the white raiment of a seasoned and unaging maturity.

Can youth and age thus join hands and work together? Can psychiatry and religion pool their strength and march together for the healing of a world that is deeply disordered and desperately sick? I believe that they can and will, for they are bound together not only by a common mission of help and healing but by common convictions and principles. One common foundation, on which it is fitting to dwell in conclusion, is the primacy of love in the ultimate interpretation of life.

Sigmund Freud, the father of modern psychiatry, is often looked on by leaders of thought in all fields as the incarnation of irreligion and the sworn underminer of ethics and morals. From a superficial glance this seems to be true. Upon a longer look, however, it becomes evident that in the system of Freud we have, in the fine phrase of Dr. Karl Stern, "an embryology of love." From the standpoint of Christianity building upon the twin-foundations of Judaism and Plato, this is a development of immense significance. As we have ventured to say in a recent book[1]:

> "The destiny of man, it seems, positively or negatively, is love. He cannot escape his nature. We may say that Freud, in not a few ways a second Augustine, is one of the major modern prophets preparing the way for the coming in new splendor and power of Christ the Lord of love."

REV. CHARLES W. LOWRY, PH.D.
Rector, All Saints' Episcopal Church,
Chevy Chase

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[1] LOWRY, C. W.: Communism and Christ. New York: Morehouse-Gorham, 1952.

FUNDS NEEDED FOR COMBATING CANCER

Present statistics indicate that 1 out of every 5 Americans eventually will have cancer. For those stricken, the chances of survival are now 1 in 4. This figure could be doubled through early diagnosis and prompt, adequate treatment.

A recent survey made for the American Cancer Society discloses that approximately 30 million more Americans can recognize at least one of the symptoms of early cancer today than were able to only 10 years ago. This means that 80 million people are now aware of cancer's "seven danger signals."

The marked increase in informed people can be credited largely to the vigorous and comprehensive public education program of the American Cancer Society, which is aimed both at dissemination of knowledge of symptoms and at fostering a clear understanding of the nature of cancer.

Last year 235,000 free educational booklets on cancer were distributed to District residents and workers. "Breast Self-Examination," a motion picture which teaches women how to examine their breasts for cancer symptoms, has been shown to more than 28,000 women in Washington.

This educational effort is combined with the Society's research and service programs. Nationally the ACS has awarded 1,200 grants to scientists since 1945 to investigate the cause of cancer. Last year $27,000 was granted to institutions and individuals in the District of Columbia.

The service program of the local Society last year supplied Washington cancer patients with more than 100,000 surgical dressings; it financed 2,300 home nursing visits to needy cancer victims; $5,200 was allocated to help care for cancer sufferers at the Washington Home for Incurables; $48,000 was granted for the support of five local tumor clinics.

Until a cure for cancer—long hoped for and patiently sought—has been discovered, education, research and service represent the only weapons of control. These activities make up the three-pronged attack by which the American Cancer Society is combating the menace of cancer.

This life-saving work must continue. Whether it does or not depends on our determination, our courage and our generosity. The American Cancer Society will conduct its annual fund-raising drive in April. A sum of $225,000 is needed this year to finance programs of education, research and service in Washington. Your contribution to the Cancer Crusade will be appreciated. Send your donation to the American Cancer Society, 1415 Eye Street, N.W., Washington 5, D. C.

MURRAY M. COPELAND, M.D.
President, District of Columbia
Division, American Cancer Society

THE COMPLAINTS THAT REACH OUR GRIEVANCE COMMITTEE

The past two decades have brought forth an unprecedented public criticism of the personal relationship of doctors to their patients. At first the profession tended to shrug off or minimize this unpleasant phenomenon, but today it has become everywhere the subject of earnest medical attention and planned action.

Among the pioneer remedial ventures over the Nation was the establishment by our Medical Society, in 1939, of a Grievance Committee, charged with receiving and adjudicating specific complaints against individual physicians and also complaints by one physician against another. This Committee has become one of the busiest and most important within the Society, and its work is one of our most realistic and effective answers toward improved public relations and the reduction of law suits against doctors.

During the past year the Committee has received an average of 12 complaints a month. It takes little imagination to visualize the amount of work involved in investigating such a volume of grievances. Yet all who have helped shoulder this burden as members of the Committee have been deeply impressed by the need for what is being done. Also, the experience of service on the Grievance Committee may be described as exceedingly valuable postgraduate medical education.

The general types of complaint brought before the Committee may be classified as follows (arranged in approximate order of frequency):

1. Excessive charge for services.
2. Complaint about charges which the patient did not contemplate under an original discussion of costs.
3. Complaint by a Medical Service subscriber that the doctor has added an unjustified charge above Medical Service coverage.
4. Incompetent and/or negligent treatment.

5. Failure of the doctor to respond to emergency or night calls.

6. Discourteous treatment at the hands of members of the doctor's office staff or family.

7. Discourteous or threatening treatment incident to the collection of bills.

8. Failure to call consultants or, on the contrary, excessive use of consultants and/or laboratory procedures.

9. Allegation that the doctor experimented with untried methods or, on the other hand, that he failed to use modern methods.

10. Complaint that certain therapeutic results were guaranteed and failed to materialize.

11. Alleged demands for prepayment for services in an emergency or on a night call.

12. Alleged failure of the doctor to be helpful in guiding the patient to another physician when unable or unwilling to take the case himself.

13. Allegation that the doctor made a frightening diagnosis or prognosis without foundation.

14. Complaint by one physician against another, usually related to alleged lack of professional courtesy in mutual relations with a patient.

Through service on the Grievance Committee one gains the impression that many of the complaints received have a certain basis in fact, usually attended by much misunderstanding which could have been avoided had the doctor exercised a bit more time, patience and personal interest. Some complainants are clearly irrational and have small foundation for their grievances, yet even in these cases it often seems that the doctor might have avoided the complaint by recognizing the patient's personality characteristics and displaying exceptional forbearance and tact instead of standing rather stiffly upon his sense of justice. It may safely be assumed that most doctors do display exceptional tact with severely neurotic persons or the work of the Committee would be many times the present volume.

It is often an obvious shock to a conscientious doctor to be required to answer a complaint to the Grievance Committee, but most do so in a good spirit and with full coöperation. On that basis most cases are compromised or settled amicably, but in rare instances coöperation is poor. When this is so, or when the complaint is believed to be justified, the Committee does not hesitate to take appropriate disciplinary action. Since doctors are subject to all human frailties, it is inevitable that the Grievance Committee should find among them an occasional badly adjusted and irresponsible personality from whom the public and our own professional repute must be protected.

It is suggested that most of the complaints to which the Grievance Committee listens, including those involving money, arise from lack of a sufficiently warm and personal kind of relationship between doctor and patient. Even though achievement of that often takes more time than seems available, it is an effort that should never be dismissed lightly, since people who like us personally don't sue us or complain about us to the Grievance Committee.

WALTER STOKES, M.D.
Chairman, Grievance Committee

NEW AND NEWSWORTHY MEDICAL JOURNALS

Along with head colds and virus infections, January brought out a rash of new medical journals. Several of them are of such high calibre as to deserve more than casual mention in our news columns. We hope our readers will not desert the ANNALS for greener fields, but we warmly recommend the newcomers for supplementary reading.

A new specialty journal, *Diabetes*, has considerable local interest. On its Editorial Board of seventeen distinguished physicians are two members of the Medical Society of the District of

Columbia, our Editor, Dr. Wallace M. Yater, and Dr. Russell M. Wilder, Associate member, who recently retired from the Mayo Foundation and is Director of the National Institute of Arthritis and Metabolic Diseases of PHS. *Diabetes* is the official organ of the American Diabetes Association, whose Secretary is Dr. John A. Reed, an Active member of the District Medical Society and national Chairman of the 1952 Diabetes Detection Drive. The Executive Director of ADA, and to whom much credit is due for the inauguration of this bimonthly journal, is J. Richard Connelly, who served as Assistant Secretary of our Society for three years.

The January–February number of *Diabetes* comes to us with a drawing on its cover of the late Sir Frederick G. Banting, co-discoverer with Dr. Charles H. Best, of the University of Toronto, of insulin and its use in the control of diabetes. The editor is Dr. Frank N. Allan, of the Lahey Clinic, who will be advised by the Editorial Board under the chairmanship of Dr. Best. The issue opens with a "Salute to Diabetes" by Dr. Elliott P. Joslin, of Boston, Honorary President of ADA. The leading scientific paper is the Banting Lecture for 1951 by Dr. C. N. H. Long of Yale University. Large sections are devoted to proceedings of the ADA and to abstracts of articles in the field of diabetes, since the new journal is a combination of two previous publications, *Proceedings*, which appeared annually, and *Diabetes Abstracts*, a quarterly.

Our sister component society to the north, the Medical and Chirurgical Faculty of the State of Maryland, has issued the first number of the *Maryland State Medical Journal*, a publication which gives promise of upholding the dignity of this venerable organization.

In his Foreword, Dr. George H. Yeager, Secretary of the Faculty and Editor of the *Journal*, points out that the *Journal* is not a new venture but the reëstablishment of a former publication. Previous publications of the Faculty were the *Maryland Medical and Surgical Journal and Official Organ of the Medical Department of the Army and Navy of the United States* (1839 to 1843) and a monthly *Bulletin*, published from 1908 to 1922. During the years 1887 to 1918 the *Maryland Medical Journal* carried notes and communications of the Faculty and for a brief period, 1905–8, was the official publication medium of the Faculty. The *Journal* replaces a small *Bulletin* which has been issued by the Faculty since 1927.

In its bottle-green dress, *Public Health Reports*, larger than its predecessor, bears no resemblance except in name to the GPO publication it replaces. Although the January issue is Number 1 of Volume 67, the monthly *Reports* is almost "new," since it is an amalgamation of the former weekly *Public Health Reports* with the monthly *Tuberculosis Control Issue of Public Health Reports*, the monthly *Journal of Venereal Disease Information*, and the monthly *CDC Bulletin*.

Mr. Howard Ennes is Executive Editor and Mr. Taft S. Feiman, Managing Editor, of *PHR*. Dr. Edward G. McGavran, Dean of the University of North Carolina School of Public Health, is Chairman of a distinguished Board of Editors, which includes authorities not only in the field of medicine but in allied professions. Among them is Dr. Wilder, previously mentioned in this article. Surgeon General Scheele has written the introductory statement for the January issue.

PHR is an attractive and readable journal, a credit to the Public Health Service, a branch of the Federal Security Agency. Its 120 pages are packed with scientific information. This first issue contains 13 signed articles, with subject matter ranging from *Trichophyton tonsurans* ringworm to salaries of state health department personnel. Its table of contents indicates the vast scope of activities of the Public Health Service, which has a corresponding reservoir of contributors. Physicians who like historical data will enjoy the first article, which traces the history of *Public Health Reports* from its one-page beginning as a *Bulletin* in 1878 to its present expanded form.

The advent of the *Journal of the Student Amer-*

ican Medical Association was reported briefly in the news columns for February, but the *Journal* assuredly deserves mention here along with other new scientific journals.

The *Journal of the Student AMA* is most conspicuous for its ambitious beginning. Like the usual golden, fluffy chick, it bears little resemblance to *J.A.M.A.*, the mature parent bird. The enviable exuberance of youth is reflected in its use of color, elaborate lay-out, and profuse illustrations. It is not too surprising to learn from Russell F. Staudacher, Executive Editor, that the Chicago artist for *Life* and *Look* was called upon to design this most attractive mouthpiece of an organization which was only one year old on December 29, 1951. The *Student Journal* should not have so much difficulty striving for greater goals as for maintaining the high standard it has already set for itself.

A large section of the first issue is devoted to socioeconomic articles, none of them of a controversial nature. The leading scientific article is one on "Surgery and Bronchiectasis" by Dr. Robert M. Janes, of the University of Toronto. The other two are by medical students, Herbert A. Saltzman, of Jefferson Medical College, and Raymond W. Browning, of Tulane University. Not of least interest to this reader was Local Anesthesia, a series of drawings by Bruce W. Pine reminiscent of the *New Yorker's* sophisticated brand of humor.

The *Journal of the Student AMA* will be published nine times a year. It is distributed without charge to American medical students and interns. The modest subscription rate of $3.50 per year will appeal to physicians who still maintain an interest in medical-student activities.

Praiseworthy too is the *Journal of the Medical Association of Georgia*, which begins its 41st year of publication with a bright and cheerful countenance. Its new dress is not confined to the cover; the entire journal has been revamped. The "new look" has been accomplished primarily by distinctive article headings and well illustrates what can be done economically by means of typography alone. Dr. David Henry Poer and his assistants can be proud of the face-lifting which characterizes their self-styled "Miss 1952." It appears too that the Editorial Board has given its readers a well balanced diet.

Readers who have stayed with me thus far may be interested in some comments apropos the beginnings of our own medical journal. The date of origin of state medical journals was brought up at the recent State Editors' Conference in Chicago, but few of the editors knew how long their journals had been in existence, since many of them, like our own, had had precarious beginnings and had not been published continuously from the date of their inception.

An article by Dr. John B. Nichols, published in the first issue (January 1932) of Volume 1 of the MEDICAL ANNALS gives a brief history of the publications of the District Medical Society. From 1871 on, a number of local medical journals came into existence, only to expire after a few volumes had been published. Proceedings of the Society were thus bandied about among a number of short-lived publications. In spite of this, Dr. Nichols observed, the proceedings of the Society were published "in adequate and creditable form" from 1892 to 1917. During that time the most flourishing publication was the *Washington Medical Annals*, a bimonthly journal under the editorial management of Dr. Daniel S. Lamb, which continued for 19 volumes, from 1901 to 1920. In 1924, Dr. Coursen B. Conklin, then Secretary of the Society, started a monthly *Bulletin*, which was succeeded in January 1932 by the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA. Dr. Wallace M. Yater, the first Editor of the ANNALS, began his 21st year as editor of the Society's publication in January of this year. Dr. Conklin was the first Managing Editor and was succeeded in that post by Theodore Wiprud, the first lay Secretary of the Society, in 1938.

In the early days of publication the Editorial Committees, as reported in Dr. Lamb's History of the Society, had much difficulty keeping within the publication budgets. This is understandable when we note that the budget for 1902, for instance, was $600. For the year 1907 the History records that the ANNALS showed a net cost of $1.13 per page, which "covered all expenses incident to the publication." Today this is the approximate cost of the paper for one page. For doctors, publishing, it seems, has always been an expensive activity.

A. L. E.

In and Out of Focus

BY THE OBSERVER

Organization Structure Studied

It would be interesting to know how many members of our Medical Society have read its Constitution and By-laws, in whole or in part. Probably very few, because admittedly it is unexciting reading. To the historically-minded, however, it is most rewarding.

Members who were active in the Society immediately prior to the adoption of the present Constitution and By-laws in January, 1939 and who had an up-to-date copy in their possession will remember how cluttered it was with amendments, deletions and corrections. In fact, the inserts which had been pasted in as nearly as possible to the texts to which they related were so numerous that some parts of the document were obscure.

One had only to read the amendments to become aware of the trials and tribulations which had engulfed the Society during the mid-thirties. Certainly they were an indication of the instability of that period.

In the years which followed, the Society entered quieter waters. Amendments and other changes in the Constitution and By-laws, while quite numerous, have not been of too vital a nature. They include the reduction in number of business meetings, the creation of new membership classifications, i.e., Affiliate and Resident-Intern memberships, a modest upping of the dues in the various membership categories, and a revision of the procedure in electing applicants to membership. While these modifications have not vitally altered the Society's structure or the manner in which it conducts its operations, changes wrought by time and circumstances, it now appears, will have a profound effect upon the organization and its future.

The 1940's were a period of swift movement. The face of society was altered more radically than in the previous 25 years. In the light of these developments the Executive Board has decided to reappraise the Society's Constitution and By-laws. It might be mentioned in passing that this action was taken largely at the behest of Dr. Frank D. Constenbader, President of the Society, who has felt that there are contradictions in the Constitution and By-laws which should receive early attention, and that the need for revision of many of its provisions should also be given consideration.

Among Dr. Costenbader's proposals is one which would change the organization year from a fiscal to a calendar basis. If the suggestion is approved, officers of the Society will take office on January 1 instead of July 1. Arguments advanced by Dr. Costenbader in favor of this change are that the Society's financial records are kept on a calendar basis and that the Society's program is so arranged that its climax comes in the late fall when the ANNUAL SCIENTIFIC ASSEMBLY is held. At the present time, the President takes office three months prior to the Society's most ambitious undertaking, the remainder of the year being an anticlimax. Dr. Costenbader's feeling is that the ASSEMBLY should be the high point in the President's term of office.

Another argument in favor of this change is that the Society's delegates to the American Medical Association serve on a calendar basis although they are elected by the Society for a two-year term beginning on July 1. As a result they carry on for six months after the election of their successors.

There has been discussion, too, of shortening the terms of officers of the Society. Some have expressed the view that the terms of some are too long and that they might be shortened without jeopardizing the continuity of the Society's program.

These and other suggestions will be brought to the attention of the recently appointed Committee on Revision of the Constitution and By-laws. Because of its nature, the Committee's task will require several months, and it will do well if it is prepared to report by the end of the year.

Members of the Committee are: Dr. Walter Freeman, *Chairman*, Dr. William M. Ballinger, Dr. Frank D. Costenbader, and Dr. Harry Zehner.

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The Ruffin Bequest

All of us can recall incidents which though trivial in themselves have left an indelible impression on our memories. An example of this is an incident which occurred when your Observer first came to Washington in the late 1930's. The District Medical Society was then passing though a tumultuous period and valiant efforts were being made by its leaders to stabilize the organization. Means finally adopted to achieve this end were simplicity itself. First of all, agenda for business meetings of the Society were planned with the determination that they would be adhered to. Thoughtfully prepared reports supplanted free-for-all discussions, which more often than not led to bitter, inconclusive sessions. It was a new experience for the Society, but members fortunately were willing to give the new endeavor a try.

Your Observer recalls the tenseness of the Society's officers when the new order made its bow. The first meeting was successfully hurdled. At the close of the second, a dignified, white-haired doctor with a courtly manner said to your Observer, "Young man, this is the best conducted meeting I recall since I have been a member of the Society." Pleased, your Observer inquired of an officer the doctor's name. He was told that it was Dr. Sterling Ruffin. While, of course, your Observer had not conducted the meeting he had had a hand in implementing it and the compliment was most welcome. The remark stuck in his mind and fourteen years later he is still grateful for the timely lift.

Subsequently your Observer came to know a great deal more about this distinguished Washington physician. He learned that he was esteemed not only as a doctor but as an educator. He discovered, too, that Dr. Ruffin was a prominent civic leader and highly regarded in financial circles; that many honors had come to him in a long and useful life.

Shortly after his retirement Dr. Ruffin called your Observer to his Connecticut Avenue apartment and informed him of his plan to leave a portion of his estate to the Medical Society for needy members. At his request nothing was said of his decision at the time. Subsequent to his death the Society was notified that Dr. Ruffin's will contained the following bequest:

> ". . . I give, devise, and bequeath as follows, to-wit:
>
> "K. Three-fortieths (3/40) thereof to the Medical Society of the District of Columbia to be used for the relief of ill or superannuated needy active or life members of that Society.
>
> "Awards from this fund shall be made in cash in the discretion of a majority of a special committee of five (5) members appointed by the President of the Society. No member of such Committee shall serve for a longer period than two (2) years. Reports of expenditures shall be made from time to time by the Committee to the Society, without, however, disclosing the names of the beneficiaries."

In compliance with the above provisions, President Frank D. Costenbader has appointed the following Committee on the Ruffin Bequest: Dr.

Daniel L. Borden, *Chairman*, Drs. Henry C. Macatee, R. Massie Page, Richard E. deButts, and James J. McFarland, Jr.

Cash and securities in the amount of $18,001.56 have been turned over to the Society's Treasurer by the Riggs National Bank. These are now at the disposal of the Committee, which has asked that the Society's membership be notified of the bequest and that it is prepared to give assistance in accordance with the terms of Dr. Ruffin's will.

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Behind the Scenes Typical of the activity in the Medical Society's Executive Offices preceding an important event were the preparations for the recent Midwinter Seminar. Two meetings of the Progam Committee were held well in advance of the Seminar, notes being taken on the proceedings. These were dictated and transcribed immediately afterward for the guidance and information of the Committee and the office staff. As days passed there was an increasing number of telephone calls from and to the Chairman of the Committee and others connected with the meeting. Tentative drafts of the program were eventually turned over to the office staff for typing. As is always the case there were a number of changes before the program was finally approved.

Upon your Observer's request the Chairman wrote an editorial for the Medical Annals and this together with the program was turned over to the Assistant Editor for publication. The printers were then called in and the lay-out and type to be used in a folder publicizing the Seminar were decided upon. Three thousand folders were ordered. The text of the postcard announcements was prepared and a sufficient number ordered for mailing to all members of the Society. Placards were also ordered to be posted in various medical centers, hospitals and other medical institutions. These were distributed personally by an employee of the Society.

Letters were sent to chiefs of the Army, Navy and Public Health Service in which an invitation was extended to their medical personnel to attend the Seminar. Finally there were last-minute details to be attended to, such as the employment of an operator to project slides and motion pictures, testing of amplifying equipment, and seeing to it that various items needed by speakers were on hand.

Mr. Lawrence A. Zupan, Executive Assistant, and your Observer were discussing the immense amount of detail work which falls to the clerical staff when it occurred to them that a month's work schedule might be enlightening to readers of this column. Your Observer asked Mr. Zupan to compile a list of the office procedures and details handled by the staff in January. The result follows:

Billing 1,687 members for 1952 Medical Society dues.
Inserting 1,777 names on membership cards.
Preparing the annual membership report.
Stenciling and mimeographing roster of 1,777 members (approximately 50 copies of 57 pages each).
Billing 1,090 members for 1952 AMA dues.
Billing 735 Medical Bureau subscribers.
Checking 2,300 addressograph plates for current addresses.
Closing books for annual audit and preparation of annual financial reports.
Consolidation of Medical Society, Medical Bureau and Medical Annals funds of the Society as instructed by the Executive Board and establishing a new dues record system.
Preparing letter, ballot and return envelope for Nominating Committee (mailed to 1,375 voting members).
Preparing letter and return envelope for canvass of members to determine interest in group accident and health insurance (mailed to 1,303 members).
Working out program details and distributing 1,850 Midwinter Seminar programs (see above).
Mailing 1,850 postcard notices in advance of Midwinter Seminar.
Compiling and mailing four-page Calendar of Meetings (1,850 copies).
Addressing 1,777 envelopes for mailing membership cards.
Stenographic and clerical duties incidental to actions of Executive Board and various committees.
Addressing 2,300 envelopes for mailing of Medical Annals.
Canvassing 1,777 members to determine how many wished to be placed on a list of physicians who would immunize those who plan to travel abroad.

Mimeographing letters and postcards urging coöperation of members in nursing resources survey (1,777 copies of each).

Mailing of 60 letters to members inviting them to Membership Luncheons.

Preparing and mailing of notices of Section and Woman's Auxiliary meetings.

Arranging details for dinners and luncheons of Executive Board and committees (3 dinners and 1 luncheon).

Billing of 1,000 member-subscribers of Group Hospitalization, Inc.

General correspondence.

The above list is published with full appreciation that the office staff are paid for their services. Ordinarily, there would be no reason to comment one way or another. However, the present staff deserves recognition for their unusual diligence and loyalty.

No "made" paper work is being done in the Society's Executive Offices. Every assignment is scrutinized to be certain it is necessary. Members can therefore be certain that little time is wasted; furthermore, that the mail they receive from the Medical Society has been appraised from the standpoint of its essentiality and is therefore deserving of their careful attention.

Your Observer is pleased to acknowledge the competent work of "his" staff. They, after all, make the wheels go around.

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Medical Fees and the Public

An estimated ninety per cent of the complaints lodged with the Medical Society's Grievance Committee by irate patients have to do with fees. While in most instances the facts do not justify the charge that the doctors have taken unfair advantage of them, they do point to the need for corrective measures. It is your Observer's opinion that most of these complaints could have been avoided if there had been frank and friendly discussion between the physician and patient. Under such circumstances there would be little chance for misunderstanding and the recriminations which so often ensue.

Unfortunately for everyone concerned, efforts to remedy this situation have to date not been too effective. Both sides are too often unreasonable and pride will not permit them to compromise. Articles have appeared at infrequent intervals in medical journals urging physicians to make an effort to avoid needless disagreements. The Grievance Committee has also performed a valuable service* in an effort to eliminate obviously unnecessary complaints. However, much more needs to be done. Perhaps a minimum fee schedule for the guidance of physicians in private practice and for the information of their patients would be helpful.

As late as 1939 such a fee schedule was in effect in Washington. Officials of the Medical Society considered it ineffective and of little value because the minimum fee for each procedure listed was followed by the words "and up." It seemed to them that such a schedule did little more than keep a floor under a doctor's charges. Evidently many other physicians were of a like mind for shortly thereafter it was abandoned.

After an interval of more than a decade your Observer is not so sure that this action was wise. At least the schedule served as a guide to young physicians and others who were new in the community. While it had the effect of leveling fees, it also exposed the minority who were guilty of overcharging. It would serve the same purpose now and in addition discourage the use of the fee schedule adopted by the Medical Service of the District of Columbia as a criterion for charges in private practice. This has been a disturbing development to a number of physicians.

Adoption of such a fee schedule would have a further advantage. It could be revised at intervals to meet the rising costs of carrying on a practice. Many physicians charge the same fees as they did long before the current inflationary spiral, and patients generally do not expect them to increase their charges, which is, of course, unfair.

Largely responsible for the foregoing comments was an article forwarded to your Observer by Dr. Allen S. Cross of Washington which appeared in the *Orange* (Virginia) *Review* on January 3, 1952. It seems that the doctors in the community were feeling the "pinch" because of their low fees, and a meeting of the Orange County Medical Society was called. The Society adopted a fee schedule increasing charges for professional services and making them public. Patients now know what they are expected to pay, which will undoubtedly eliminate many unpleasant situations.

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* See editorial in this issue by Dr. Walter Stokes, Chairman of the Grievance Committee.

If these observations stimulate thought and discussion of a matter of vital importance to both patients and physicians in the District of Columbia, they will have served their purpose. The remedy is largely in the hands of the doctors themselves.

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Doctoring Doctors

In a more serious vein than your Observer would adopt were he discussing the subject, Dr. James Sarnoff, in the *Bulletin of the Medical Society of the County of Kings* (New York) for January, 1952 writes:

> "It is often said that a doctor makes a difficult patient. To a certain extent, this is true mainly because he is aware of the many possibilities. During the course of his practice he is apt to prescribe certain drugs and therapeutic measures in an empirical form and for psychological reasons. The lay patient, having confidence in his doctor, follows such directions faithfully, but when the doctor is the patient, he is apt be to more skeptical about the treatment, even though it might be beneficial. Nevertheless, when the ailment is of a serious nature he is bound to abide by the course of treatment when it is properly presented to him. As a rule, however, most doctors make ideal patients because of their inherent understanding and appreciation of medical care."

Your Observer hopes that Dr. Sarnoff or his more serious-minded readers will not take offense if he admits to being mildly amused at the use of the adjective "ideal" in describing physician-patients. It stirred many memories of ailing doctors, most of them on the lighter side. One of his earliest experiences in the medical field is illustrative.

More years ago than he would like to admit, your Observer was associated with a group of physicians in a managerial capacity. One of the doctors in this group, for whom he has great admiration and respect, took a dim view of patients who fussed about their ailments. At times his patience was strained to the point where he became quite explosive. However, a change came over the good doctor when he had his operation. It was an event to be remembered by those connected with the clinic and small hospital over which he presided.

When the surgeon, who was imported from a nearby city, arrived he immediately went into a huddle with the prospective patient and his staff. In his usual authoritative manner the p.p. gave directions for the removal of his appendix. Local anesthesia had just come into use in major surgery and that suited the p.p. first-rate because he wanted a ringside seat for his operation.

More than the usual quota of physicians for a simple appendectomy gathered in the operating room the morning of the big event. For the first time, in a reclining position, the patient (he was no longer a p.p.) directed the proceedings. A mild-mannered country doctor, a good friend of the patient, was assigned the task of wiping his itching proboscis. All went well and the doctor was wheeled to his room without untoward incident except for a roseate nose, skinless about the nostrils.

Congratulating himself on the outcome (he was too exhilarated to notice what had happened to his nose), he decided to break one of his own rules, perhaps to show that he was an exceptional patient. Liquid following an abdominal operation was strictly *verboten* but the doctor-patient was thirsty—parched in fact—and who was to say him nay. Despite the protests of the head nurse he sent for some good old soda pop, which he downed with gleeful relish. The inevitable happened. Loud groanings were soon emanating from the patient's room. Your Observer in a downstairs office heard them and was considerably perturbed. Later, the nurse confided that the

Reinstatement of AMA Membership

A member of the AMA who has been dropped for nonpayment of membership dues and who wishes to have his membership reinstated would owe membership dues for the year in which he became delinquent and the year in which his membership was reinstated, but he does not have to pay membership dues for the intervening years. For example: Dr. Blank was dropped in 1951 for nonpayment of 1950 membership dues. He applies for reinstatement of his AMA membership in 1952. To bring about this reinstatement, he would be required to pay his 1950 membership dues and membership dues for 1952. Membership dues for 1951 would not be required.

patient insisted that no one had ever had such gas pains. As if this were not enough, his nose had assumed sizable proportions. Death was knocking at the door—he was sure of it. Of course he lived but it took a lot of nursing and special attention.

The doctor and your Observer have often laughed over this episode. We agreed that there is nothing which will make the doctor more sympathetic toward his patients than a dose of his own medicine.

Dr. Sarnoff continues:

"When the doctor is obliged to wait his turn in a doctor's waiting room, he can then appreciate the feelings of the patients who wait for him. He is less concerned when he just accompanies his patient for consultation, but his concern is greater when it happens to be a member of his family and especially himself. Nevertheless, such an experience serves a good purpose. It gives the doctor an opportunity to observe psychologically the different attitudes and behavior of some of those waiting patients. Some remain in blank oblivion to their surroundings, others indulge in reading the assortment of magazines on display, while still others will scrutinize the other patients.

"The doctor-patient as a rule is ill at ease when he has to wait. Even though he might pretend to read, he, as a rule, keeps his ear tuned and his eyes alerted to see and hear what goes on in the waiting room and to catch a glimpse of what goes on behind the scenes when the office door opens. We are apt to compare this office routine with our own unless we are in distress. As a rule, the courtesy is extended to the doctor-patient to see him shortly after he arrives. But this is not always the case, especially when it happens that some of these consultants have quite a few doctors as patients waiting, and when the treatments consume a great deal of time.

"During this waiting period we ponder about our condition, how to present it, and what stock to take in the doctor's opinion, advice and treatment. When we are subjected to various modalities such as fluoroscopy, electrocardiography, neurological and ocular tests and receive the various instructions, we begin to realize that the fact that we are doctors does not make us any less human in our feelings, fears and anticipations.

"The doctor-patient knows too much and you cannot tell him the same white lies and in the same manner as you would the others. The greatest amount of tact is necessary to avoid undue alarm or suspicion with regard to the seriousness of the doctor's condition."

Many a doctor's patient would find the above enjoyable and enlightening reading. One can imagine with what satisfaction they would learn that doctor-patients, like themselves, become "ill at ease" when they have to wait.

Dr. Sarnoff's concluding paragraph points to the fact that, after all, doctors are just as human as their patients. Here is his final statement:

"The doctor as a patient may have suffered greater anxiety during the course of his illness because of his apprehensive knowledge as a doctor, but in the end he is the gainer. Not only does he acquire a greater appreciation of his colleague's knowledge and skill, but he also obtains a better yardstick with which to measure his own esteem of the great amount of good that he himself does to relieve the suffering of his own patients. He is apt to become more sympathetic towards those he is treating, realizing from his own personal experience as a patient what tender care, sympathy and consideration mean when one is seriously ill."

T. W.

Concerning Those Who Work with Us

PHARMACY

THE EDUCATIONAL PROGRAM IN PHARMACY

Charles W. Bliven, M.S.
Dean, School of Pharmacy, The George Washington University

The current academic year started with 17,600 students enrolled in the 74 colleges and schools of pharmacy throughout the United States. About 4,000 of this number will complete the requirements for the Bachelor of Science in Pharmacy degree in June and will join the 102,000 pharmacists now making their contribution as members of the health professions through the many areas embraced by the field of pharmacy.

The branch of the profession in which the greatest number of pharmacists contribute to the health needs of the Nation is that of the practice of pharmacy through the 51,000 drug stores throughout the country. This area alone employs about 89,000 of the total number of pharmacists. The remaining 13,000 are engaged in the pharmaceutical field as manufacturers, wholesalers, medical service representatives, educators, hospital pharmacists, and employees of state and Federal health and law enforcement agencies, or as members of the medical groups of the armed services.

The academic training of the pharmacist is sufficiently comprehensive that he can readily adapt himself to any of the various opportunities available to him. Since his educational program prepares him to take his place as a member of the health professions, his academic work includes, with but few exceptions, courses identical with those found in the pre-medical program, and some of the courses, notably biochemistry, pharmacology, microbiology, and epidemiology and public health, parallel those of the medical curriculum. Often these courses are taken simultaneously with students in medicine.

The average 4-year curriculum* in pharmacy consists of about 135 semester hours and is required to cover not less than 3,200 clock hours of didactic and laboratory instruction. Although a standardized curriculum for all colleges of pharmacy is not mandatory, the undergraduate curriculum can be conveniently separated into 3 divisions as follows: (1) nonscientific courses in general education, (2) courses in basic sciences, and (3) professional courses. The courses of the first division, which comprise about 15 per cent of the total program, permit the inclusion of courses in languages, economics, social studies, humanities, and others of a cultural nature. The division of the basic sciences includes chemistry through the course in biochemistry, 1 year of physics, at least 1 year of biology or equivalent courses, physiology, and microbiology. These courses make up about 40 per cent of the total curriculum.

The professional courses, in which the fundamentals of the work in the other divisions are applied, constitute the largest part of the curriculum, about 45 per cent. The work in the professional area may be divided as follows: (1) pharmacy, (2) pharmaceutical chemistry, (3) pharmacology, (4) pharmacognosy, and (5) pharmaceutical administration. Courses in pharmacy make up the greatest part, about 50 per cent, of the professional courses. These include the calculations essential to pharmacy, at least 1 year of the study of the various classes of pharmaceuticals in the United States Pharmacopoeia and the National Formulary, 1 year of dispensing pharmacy, and hospital pharmacy. The curriculum in pharmaceutical chemistry embraces the work in the chemistry and pharmacy of inorganic and organic medicinals, including both the official (those of the U.S.P. and the N.F.) and the unofficial products, many of the latter being new products not yet accepted by the official books.

The professional courses in pharmacology include, in addition to general pharmacology, work in toxicology and in the biological standardization of drugs. Pharmacognosy consists of the study of the crude animal and vegetable drugs, and also more recently the study of insecticides and fungicides.

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* Five schools of pharmacy require 5 years and 1 school 6 years for graduation.

The work in the area of pharmacy administration has recently undergone modernization, and the result has been an increase in emphasis as well as in scope. As now constituted, this division of the professional work includes courses in accounting, law, pharmacy management, drug marketing, and professional and ethical relations.

Just as the recent advances in medicinal products have caused material changes in medical therapy, these same changes have brought marked changes in the practice of pharmacy. The pharmacist in his prescription department is being called on to do less compounding because these advances have changed the prescribing habits of the physician. The isolation of pure plant principles, the vast increase in the number of therapeutically effective synthetic medicinals, and the advent of the antibiotics have increased the number of "one-item" prescriptions and, accordingly, have decreased the number of "two-or-more-item" prescriptions. Thus, less compounding is required of the pharmacist today than ever before since, on the average, 74 per cent of the prescriptions written today are "one-item" prescriptions.

The decreased emphasis on compounding has not lessened the responsibility of the pharmacist. Today he is handling more potentially dangerous drugs than ever before. Indeed, he is required to stock a greater number of these drugs than ever before to meet the prescribing habits of the physician. To meet the needs of the physician the pharmacist is called upon to answer an increasing demand for information on these new drugs and thus, while required to do less compounding, he is assuming an equally important role as consultant to the physician who may have difficulty in keeping up, because of the demands on his time, with the increased number and forms of therapeutic products.

This change in the practice of pharmacy has, of necessity, caused a shift in emphasis within the pharmaceutical curriculum. More time is being devoted to the chemistry and pharmacy and to the pharmacology of these new medicinal agents in order that the pharmacist will possess the fundamentals with which to better serve the physician in his new role.

The selection of students entering the schools and colleges of pharmacy has received increased attention during recent years. Personal interviews and a series of predictive tests are frequent requirements in these institutions and assure a lower mortality of those students embarking on the heavily laden science program of 135 semester hours. Too, such a program of selection provides young men and women possessing the personal qualifications essential for the successful practice of the profession.

Two national organizations provide leadership and guidance for pharmaceutical education. The first, the American Association of Colleges of Pharmacy, has provided valuable guidance for more than 50 years, while the American Council on Pharmaceutical Education has served as the national accrediting body since 1939. At the present time 72 of the 74 schools and colleges are accredited by the Council. All schools have been reëxamined since World War II, and a new classification of existing schools will be issued in July of this year. The new list will classify schools on an "A-B-C" basis. Class A will include those schools having no important deficiencies; Class B, those having deficiencies which may be corrected promptly by administrative action; and Class C, those schools having deficiencies which will take considerable time and effort to correct. A school falling in Class C will be allowed a period not to exceed 3 years to correct the existing deficiencies or show cause why it should not be dropped from the list of accredited schools.

Before a graduate in pharmacy is permitted to practice, he must meet the requirements of the board of pharmacy in the state in which he may wish to practice. To be eligible for the written and practical examinations required by most boards, the applicant must present evidence of graduation from an accredited college of pharmacy and in addition must have had, in most states, at least 1 year of practical experience in a pharmacy.

Reciprocity is practiced among the states and the District of Columbia (with the exception of the states of California, New York and Florida) for those applicants successfully meeting the requirements of a given state board and who have practiced for a year in the state in which examined.

The Metropolitan Area of Washington is served by the George Washington University School of Pharmacy. The school is a member of the American Association of Colleges of Pharmacy and is ac-

(*Continued on page 180*)

Calendar of Medical Meetings

Date	*Society or Section*	*Program*	*Place and Time*
March 24	*ANESTHESIOLOGISTS	See page 172	Medical Society Auditorium, 8:00 p.m.
March 24	*GEORGE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE	KELLOGG LECTURE: "The Cardiac Patient as a Surgical Risk," FRANCIS CLARK WOOD, M.D., Professor of Medicine, University of Penna.	Hall A, School of Medicine, 1335 H Street, N.W., 8:30 p.m.
March 24	WASHINGTON MEDICAL AND SURGICAL	"The Surgical Treatment of Cataract," JAMES SPENCER DRYDEN, M.D. Case Report: C. W. CAMALIER, JR., M.D.	Hotel 2400, 6:30 p.m.
March 27	*GEORGE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE	KELLOGG LECTURE: "A Treatment Approach to Psychosomatic Conditions," OLIVER SPURGEON ENGLISH, M.D., Professor of Psychiatry, Temple University	Hall A, School of Medicine, 1335 H Street, N.W., 8:30 p.m.
March 29	*RHEUMATISM	"Recent Advances in the Management of Gout; the Use of Benemid," ALEXANDER GUTMAN, M.D., Professor of Medicine, College of Physicians and Surgeons, Columbia University	Medical Society Auditorium, 8:00 p.m.
April 1	SECTION ON OPHTHALMOLOGY	Speaker: H. SAUL SUGAR, M.D., Detroit, Mich.	Kennedy-Warren, 6 p.m.
April 9	*WASHINGTON PSYCHIATRIC	RESIDENTS' NIGHT: "Psychiatric Manifestations in Wounded Men," CAPTAIN DOUGLAS PRICE, MC, USA, WALTER Reed Hospital "Some Considerations in the Treatment of Alcoholism," THOMAS E. GRIFFIN, M.D., St. Elizabeths Hospital	Medical Society Auditorium, 8:30 p.m.
April 21	OSLER	Paper: WILLIAM A. HOWARD, M.D. Case Report: JOHN L. PARKS, M.D.	Host: Dr. Thomas McP. Brown
April 26	WOMAN'S AUXILIARY TO THE MEDICAL SOCIETY	Dinner Dance	Continental Room, Wardman Park Hotel: Cocktails, 7 p.m.; dinner 8 p.m.
April 28	WASHINGTON MEDICAL AND SURGICAL	"Review of the Treatment of Deafness," T. FRASIER WILLIAMS, M.D., Arlington, Va. Case Report: HAROLD HEIGHES, M.D.	Hotel 2400, 6:30 p.m.
May 7	*THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA	Annual Business Meeting	Medical Society Auditorium, 8:00 p.m.
May 20	CLINICO-PATHOLOGICAL	Case Reports: THEODORE J. ABERNETHY, M.D., AND WENDELL M. WILLETT, M.D.	Host: Dr. Walter W. Boyd

* Open meetings

STEWART TRUST CANCER GRANTS

Three Washington institutions have received renewal grants from the Alexander and Margaret Stewart Trust to provide care for needy cancer patients in the Washington Metropolitan Area and for continuation of clinical research in cancer. They are the District of Columbia Division of the American Cancer Society and the George Washington and Georgetown Universities.

The District Cancer Society will use its grant of $33,600 to help needy cancer patients who are not eligible for assistance from the D. C. Health Department or through the Hospital Service Agency. The funds are administered by the Cancer Aid Plan Committee of the Society.

A total of 56 patients received financial aid in 1951 from the original Stewart Trust grant. Funds advanced or authorized for these patients amounted to $20,987.

Mr. Walter S. Pratt, Jr., Chairman of the Cancer Aid Plan Committee, states that since experience under the Plan is still quite limited, it is difficult to estimate the probable number of applications this year. However, he says it seems likely that requests for aid will range from $3,500 to $4,000 monthly in 1952.

Application for assistance from the Cancer Aid Plan must be made by a licensed physician practicing in Metropolitan Washington. Further details regarding the Plan and its operation can be secured by writing or telephoning the Cancer Society headquarters, 1415 Eye Street, N.W., Executive 3692.

Two grants for care and clinical research in cancer have been received by the George Washington University. In both cases the grants are designed to help and comfort persons whose illness from cancer indicates they are incurable. The Fund has awarded $25,000 for home care of patients too ill to come to the clinic for treatment but not ill enough to require hospital care. An additional $20,184 has been awarded for research to evaluate methods of treating cancer patients who are beyond help by routine surgical or X-ray therapy.

Both grants will continue projects in progress previously supported by the Stewart Fund at the George Washington University Cancer Clinic under the direction of Dr. Calvin T. Klopp.

Under the home-care program patients able to pay and those unable to pay for service receive visits from physicians and nurses, necessary medicines, appliances and housekeeping aid arranged for by the Clinic's social service worker. The service spares the costs of hospital care to the patient and the community and also permits the patient to be with his family, a source of great consolation on both sides.

The grant of $20,184 will permit the continuation of work by Dr. Jeanne Bateman on development and evaluation of methods of treating cancer patients who can no longer be helped by further surgery or irradiation. Certain drugs do benefit cancer patients, but are never curative. Among these are nitrogen mustards and vitamin antagonists. By devising better methods of administering these drugs and administering them together with antibiotics, it has been possible to help some terminal cancer patients by relieving pain and occasionally transforming an inoperable cancer into one which can be successfully removed.

A gift of $25,000 from the Stewart Trust to the Georgetown University Medical Center to carry on the Home Care Service for the calendar year 1952 is the third annual grant of that sum to be awarded to Georgetown.

The Georgetown home-care program, begun in January, 1950, provides the equivalent of hospital care in terms of medical, nursing and social services for those preterminal and terminal cancer patients who may desire to remain at home, or those who are unable to afford or obtain hospitalization because of cost or lack of hospital beds, by returning patients to their homes when, in the opinion of physicians, they no longer need hospitalization.

In the calendar year 1951 the service carried 33 cases on its rolls, of which 10 were held over from the previous year. The remaining 23 were accepted from a total of 82 cases referred for home care during the year.

Patients with varying stages of cancer use the service, and some patients are totally bedridden. With the aid of a fully equipped station wagon, the Georgetown home-care staff is able to perform many extraordinary bedside services, such as intravenous therapy and blood transfusions.

Provision is made for the readmission of patients to the Georgetown University Hospital as necessary.

The hospital records are left open during the home-care period, and the case is recorded as if the patient is actually in the hospital building.

The maximum load of 20 patients is maintained by the service at all times. Private physicians wishing the Georgetown Medical Center to participate in the care of patients have been invited to refer patients to the service. The director of the Home Care Service may be reached through the Home Care Secretary, Ordway 4000, Extension 469.

FCC APPROVAL FOR MEDICAL DIATHERMY EQUIPMENT

Following is some pertinent information relative to the proper operation of medical diathermy equipment after June 20, 1952. Present and prospective operators of diathermy equipment should familiarize themselves with the rulings of the Federal Communications Commission.

Section 18.51 of the Commission's Rules provides that diathermy equipment manufactured prior to July 1, 1947 may continue to be operated, without type approval by the Commission or certification by a competent engineer, until June 30, 1952, provided that no harmful interference is caused to authorized radio services.

After June 30, 1952, type approval or certification will be necessary for continued use of such equipment. Procedures for certification by a competent engineer that a machine is capable of meeting the requirements of the rules of the Commission and for FCC type approval are set forth in Sections 18.11–18.16 of the Commission's Rules. In order to be capable of certification, a machine must operate on one of the frequencies set forth in Section 18.11 with spurious and harmonic emissions reduced to limits prescribed in Section 18.11(b), or, in lieu thereof, must be operated within the confines of a shielded room or space in conjunction with a power line filter, a rectified and filtered power supply, and with spurious and harmonic emissions reduced to the limits prescribed in Section 18.12 (b).

Certain types of diathermy machines may be modified to conform to the Commission's Rules. However, since each machine will require individual treatment, it may be impossible to state that any particular non-conforming unit, from an engineering standpoint, may be economically modified to comply therewith.

A change in frequency to one of the bands set forth in Section 18.11 (a) would not in itself necessarily be sufficient to assure compliance with the Commission's Rules since Section 18.11 (b) requires that any radiations on frequencies other than those specified in Section 18.11 (a) shall be limited to a maximum of 25 microvolts per meter at a distance of 1,000 feet or more from the diathermy equipment causing such radiations.

The Commission does not maintain a file of technical information relating to the modification of particular diathermy units. The manufacturer of such equipment or a competent radio engineer may, however, be in a position to render assistance in this matter.

Registration of diathermy equipment with the FCC was a wartime measure and is no longer required.

Diathermy machine operators are normally responsible for taking steps to eliminate interference caused to radio reception, irrespective of the type approval status of the interfering diathermy machine; however, an exception to this rule has been made in cases of interference to receivers arising from direct intermediate frequency pick-up by such receivers of the fundamental frequency emissions of type approval or certified diathermy equipment operating on prescribed fundamental frequencies and otherwise in accordance with the rules.

MEMBERSHIP

The following applicants for membership were duly elected to membership at the meeting of the Executive Board, January 28, 1952, in accord with Amendment XI, Section 2, of the Constitution and By-laws of the Society.

Associate Members

Augusto Aguilera, 3719 South Dakota Avenue, N.E.
Cornelius J. Burns, Prince Georges General Hospital, Cheverly, Md.
Louis R. Lang, 8641 Colesville Road, Silver Spring, Md.
Morris Perry, 8114 New Hampshire Avenue, Silver Spring, Md.

News and Personals

The Second Army Surgeon, Brigadier General Alvin L. Gorby, and a group of specialists will conduct a series of **orientation conferences for Army Medical Service Reserve Officers** in the Second Army area during March, 1952. Following is the itinerary:

March 15	Cleveland
March 16	Cincinnati
March 22	Philadelphia
March 23	Richmond
March 29	Pittsburgh
March 30	Baltimore

Following previous policy the Second Army is taking the orientation conferences to the field so as not to infringe on the professional time of Medical Reserve Officers by calling them to Army headquarters. A further convenience is that they are being held on weekends with a starting time of 1:30 p.m. Reserve medical officers should contact their ORC unit instructors for complete details, including agenda and speakers.

The program for the next meeting of the **Washington Society of Anesthesiologists** was received too late to appear in the Calendar of Medical Meetings in the February issue. The Society will meet in the Medical Society's auditorium, March 24, at 8 p.m. Four 10-minute talks have been arranged, each one to be followed by brief discussion. Subjects and speakers are:

"The Present Status of Muscle Relaxant," Dr. C. Herbert Spencer, Fellow in Anesthesiology, George Washington University School of Medicine.

"Preliminary Survey of Relationship of Obstetric Analgesia and Anesthesia to Asphyxia Neonatorum," Dr. Morton Berkow, Resident in Anesthesia, Veterans Administration.

"The Use of Antihistamines in the Prevention of Transfusion Reactions," Dr. Seymour Alpert, Instructor in Anesthesiology, George Washington University School of Medicine.

"The Management of Cardiac Arrest," Dr. Salomon Albert, of Beirut, Lebanon, Fellow in Anesthesiology, George Washington University School of Medicine.

The Department of Medicine of **Georgetown University School of Medicine** is sponsoring a **Postgraduate Course in Clinical Electrocardiography,** which began on March 6 and will continue in weekly two-hour sessions for 12 weeks. The lecturers are Dr. Joseph M. Barker, Associate Professor of Clinical Medicine, and Dr. W. Proctor Harvey, Instructor in Medicine. The registration fee is $50.00.

Donation fees at three cancer detection centers in Washington have been increased from $15 to $20. The price change, recommended by the D. C. Division of the American Cancer Society and approved by the District Medical Society, was necessitated because of the rising cost of medical services offered. Examinations at the cancer detection centers are given to patients at cost. The new fees will be applied at Garfield Memorial Hospital, George Washington University Cancer Clinic, and Georgetown University Medical Center.

At the meeting of the **Executive Board of the Medical Society of the District of Columbia,** January 28, the following physicians were appointed to serve as chairmen of committees for the 23rd ANNUAL SCIENTIFIC ASSEMBLY:

Program: Dr. Ralph M. Caulk
Scientific Exhibit: Dr. Alfred A. J. Den
Public Health Exhibit: Dr. James J. Feffer
Radio, TV and Motion Pictures: Dr. Frank S. Ashburn
Social Affairs: Dr. Lawrence A. Rapee
Attendance: Dr. William T. Gibb, Jr.
Women's Activities: Dr. Helen Gladys Kain

Selected to serve on the new Committee on Medical Education Fund were: Dr. Alan F. Kreglow, *Chairman;* Dr. Frederic G. Burke and Dr. Robert B. Nelson, Jr.

Another new committee has been created to study and recommend revisions in the Constitution and By-laws. The members of the Committee are: Dr. Walter Freeman, *Chairman;* Dr. William M. Ballinger and Dr. Frank D. Costenbader.

Dr. Duane C. Richtmeyer was named to succeed Dr. Arch L. Riddick on the Grievance Committee.

Dr. Frederick O. Coe was nominated to succeed himself as a Vice President of the Washington Academy of Sciences.

The Board voted to accept the invitation of the D. C. Pharmaceutical Association, extended by its President, Mr. F. Royce Franzoni, to hold a joint meeting with the Medical Society. The meeting will be held in conjunction with the Annual Business Meeting of the Society on May 7.

In a discussion of membership dues from physicians who resign from the Society, the consensus of the Board was that anyone who had not paid his dues by January 1 and who resigned after that date and before June 30, be required to pay dues for the first half year; if he resigned after June 30, he be required to pay dues for the full year.

Competition for the **1952 Kenfield Memorial Scholarship** opened March 1. The American Hearing Society is administrator of the annual award to a prospective teacher of lipreading to the hard of hearing. Applications should be mailed before May 1 to Miss Rose Feilbach, 1157 Columbus Street, Arlington, Va.

Applicants for the scholarship must be well adjusted individuals with pleasing personality, legible lips, a good speech pattern, and no unpleasant mannerisms. Graduation from college with a major in education, psychology, and/or speech is a requirement. Winners of the award are entitled to take a teachers' training course in lipreading from any normal training teacher, school or university in the United States offering a course acceptable to the Society's Teachers' Committee. Physicians are urged to inform qualified persons of this scholarship.

Six members of the teaching staff of Georgetown University School of Medicine attended and took part in the meetings of the **Southern Section of the American Federation for Clinical Research and the Southern Society for Clinical Research** in Atlanta, Ga., January 18 and 19. They were: Dr. Harold Jeghers and Dr. Hugh H. Hussey, Professor and Associate Professor of Medicine, respectively, and Drs. Edward D. Freis, Laurence H. Kyle, William P. Walsh and Robert T. Kelley, all of the Department of Medicine. Dr. Freis was elected Vice President of the Southern Society for Clinical Research.

Members of the group presented the following papers before the Southern Section of AFCR: "The Effect of Acute Reduction of Arterial Pressure Using Hexamethonium on the Manifestations of Congestive Heart Failure in Man" by Drs. Kelley, Thomas F. Higgins and Freis, and "The Treatment of Barbiturate Poisoning by Hemodialysis" by Drs. Walsh, Kyle, Paul D. Doolan and Jeghers.

The following papers were presented before the Southern Society for Clinical Research, the last two by title only: "Hemodynamic Alterations in Acute Myocardial Infarction: Mechanism of Cardiogenic 'Shock'," Drs. Freis, Harold W. Schnaper and Robert L. Johnson; "A Simplified Method of Management of Hypertensive Toxemias of Pregnancy Using a Purified Extract of Veratrum Viride," Dr. Frank A. Finnerty; and "Studies on the Effects of Modified Human Globin," Drs. Kyle, W. C. Hess and Walsh.

At the annual meeting of the **Washington Psychiatric Society,** January 10, Dr. Zigmond M. Lebensohn assumed the presidency of the Society for 1952. Dr. Leo Bartemeier, President of the American Psychiatric Association, was the guest speaker. His paper on "The Attitude of the Patient" was discussed by Dr. Dexter M. Bullard, Medical Director of Chestnut Lodge, Dr. Edward J. Stieglitz, specialist in geriatrics, and Dr. Preston A. McLendon, Professor of Pediatrics, George Washington University School of Medicine.

At the request of President Lebensohn, Dr. Bartemeier presented certificates of commendation to three Past Presidents of the Society, Drs. Addison M. Duval, Robert T. Morse and Norman Q Brill.

New officers elected are:

Dr. Henry P. Laughlin, *President-elect;* Dr. Seymour J. Rosenberg, *Secretary;* Dr. Marshall deG. Ruffin, *Treasurer;* Drs. Robert A. Cohen and Douglas Noble, *Council members.*

The George M. Kober Medical Society held a dinner meeting, January 21, at the Army-Navy Club. Dr. J. Gordon Bell, the essayist, presented a paper on "Some Useful Procedures in Plastic Surgery." Dr. Jed W. Pearson was host for cocktails.

At the dinner meeting, February 18, Dr. Russel S. Page spoke on "Recent Trends in Otolaryngology." Dr. John C. Murphy was host for cocktails.

CALENDAR OF MEETINGS, JANUARY 16–FEBRUARY 15

January 16	Section on Gastroenterology
January 17	Section on Radiology Health Section, United Community Services
January 19	Washington Psychoanalytic Society
January 21	Board of Censors Grievance Committee
January 22	Section on General Practice D. C. Society of Anesthesiologists
January 24	Special Committee on Teaching Technics Medical Care Services for Civil Defense Graduate Nurses' Association
January 25	Subcommittee of Medical Care
January 28	Executive Board Committee on Coöperation with D. C. Bar Association
January 30	Committee on Public Policy Washington Gynecological Society
February 5	Grievance Committee Women's Medical Society Registered X-ray Technicians of Washington
February 6	Executive Board, Woman's Auxiliary
February 7	Section on Neurology and Psychiatry Executive Committee, Gallinger Hospital
February 9	Washington Psychoanalytic Society
February 11	Committee on Blood Banks Committee on Public Relations Washington Orthopedic Club Graduate Nurses' Association
February 12	Membership Luncheon Medical Officers' Reserve Units Lay Society, Diabetes Association of D. C.
February 13	Committee on Public Policy Woman's Auxiliary Washington Heart Association
February 14	Subcommittee on Child Welfare

Members of the Washington Clinical Club met for dinner, March 4, at the Army-Navy Club. Dr. Donald H. Leeper, Jr. gave a case report on "A Complication of Acute Appendicitis."

The George Washington University Medical Society held its third meeting of the season, January 30. The guest speaker was Dr. L. Kraeer Ferguson, Professor of Surgery of Woman's Medical College of Pennsylvania and Graduate School of Medicine of the University of Pennsylvania. His subject was "Malignant and Inflammatory Lesions of the Colon."

Dr. Fred R. Sanderson was host to the **Clinico-Pathological Society** at his home in Kenwood, February 19. Two case reports were presented for discussion: "Influence of Endometriosis on Fertility," Dr. Henry L. Darner, and "A Case of Cardiac Arrest," Dr. Weston Bruner.

The Washington Psychoanalytic Society met in the Medical Society's Library on Saturday, February 9. Dr. Lawrence C. Kolb, of the Mayo Clinic, Rochester, Minn., presented a paper on "Psychology of the Amputee: Phantom Phenomenon and Pain." Discussants were Drs. O. R. Langworthy and Douglas Noble.

Dr. Caroline Jackson addressed an open meeting of the **Women's Medical Society,** March 4, in the Medical Society's auditorium. Her subject was "Some Factors in Fetal Mortality."

The D. C. Division of the American Cancer Society has moved from Fifteenth Street into new offices at 1415 Eye Street, N.W. The telephone number, Executive 3692, is unchanged.

The United Cerebral Palsy Association of Washington is now located at 1730 Eye Street, N.W. The headquarters will also serve as offices for the Southern Region of the national organization, which is located in New York City. The telephone number of the Washington office is Republic 4978.

The American Medical Association has recently established a new **Committee on Nervous and Mental Diseases** under the chairmanship of Dr. Lauren H. Smith of Philadelphia. **Dr. Francis M. Forster,** Professor and Head of the Department of Neurology of Georgetown University School of Medicine, represents Neurology on this Committee.

The District of Columbia Dental Society observed **National Children's Dental Health Day** at the Shoreham Hotel, February 4. Table clinics were held in the afternoon. **Dr. Arthur Dick,** dental surgeon and physician, an Active member of the District Medical Society, presided at one of the table clinics and led discussion on "Tumors in the Maxillofacial Area in Children."

Dr. Edward H. Cushing resigned his position as Assistant Chief Medical Director for Research and Education of the Veterans Administration, March 1. Medical Director Joel T. Boone has appointed as his successor, Dr. George Marshall Lyon, founder and director of the extensive radioisotope program in VA hospitals. Dr. Lyon was senior research assistant to Dr. Cushing.

Dr. Lyon, a native of Pennsylvania, received his medical degree from Johns Hopkins University in 1920. During World War I he served as an officer in the Chemical Warfare Service. During World War II he rose to the rank of Captain in the Navy Medical Corps. He was safety advisor and representative of the Surgeon General of the Navy on the staff of the Commander of the Joint Task Force One at Bikini. He is a Fellow of the American Medical Association, the American College of Physicians, and the American Academy of Pediatrics and a diplomate of the American Board of Pediatrics.

Dr. Charlotte Donlan assumed her new duties as Director of the Cancer Detection Clinic of George Washington University School of Medicine, February 1. The Detection Clinic is part of the University's Cancer Clinic under the general supervision of Dr. Calvin T. Klopp.

Complete physical examinations are given at the clinic, including blood count, urinalysis, chest X-ray, proctoscopic examination, and for women a pelvic examination and vaginal smear examination. Clinics are scheduled for Tuesdays, Thursdays, and Saturdays, from 8:30 a.m. to noon. The patient is expected to contribute $20 to cover costs of the examination.

Dr. Donlan is also Clinical Instructor in Radiology at the Medical School and radiotherapist at the Hospital. She was formerly Director of the Bureau of Cancer Control of the District Health Department. She is a graduate of Hunter College and of the Woman's Medical College of Pennsylvania.

Dr. Augusto Aguilera attended the Fourth International Congress on Mental Health in Mexico City in December, 1951. He was appointed chairman for one of the technical sessions on Mental Health and the Maladjusted Child. He also presented a paper on "School Failure, Psychiatric Implications" before a Working Group which dealt with "Human Relations in the School." For his services Dr. Aguilera, with other participants in the Congress, received a diploma and Medal of Distinguished Visitor from the Mayor of the City of Mexico.

Dr. Aguilera, an Associate member of the District Medical Society, is a psychiatrist on the staff of Catholic University.

Dr. Edgar W. Davis, Professor of Thoracic Surgery at Georgetown University School of Medicine, was in Birmingham, Alabama, February 15 and 16, addressing the Southern Chapter of the International College of Surgeons. He presented a paper on "The Surgical Treatment of Mitral Stenosis" on February 15 and participated in a Symposium and Panel Discussion on Surgical Treatment of Tuberculosis the following day.

Dr. John R. Pate, Director of the Southwest Health Center, was cited by the District League of Women Voters, January 29, for his "sense of responsibility as a citizen of Washington" and for his "outstanding achievements in providing public health services to the people of Southwest Washington." Dr. Pate has been Director of the Health Center since 1948. He was honored during the League's annual All-Day School, held in the Shoreham Hotel.

Dr. Philip A. Caulfield, former Chief of Staff of Providence Hospital, has been named Chairman of the Medical Staff Division of the new Providence Hospital Building Fund Campaign. His unit will be asked to raise $112,500 of the million-dollar drive for building funds. Serving with Dr. Caulfield will be Dr. Thomas F. Collins, now Chief of Staff, and

Drs. Robert U. Cooper, Leo B. Gaffney and Samuel Zola, all on the Hospital staff. The public fund-raising efforts will begin about April 1. Mr. John A. Reilly, President of the Second National Bank, is the Campaign's General Chairman.

Dr. Donald Stubbs addressed a meeting of physicians in Salisbury, Md., January 14. His topic was "The Anesthesiologist in General Therapy." On February 4 he spoke to a group of anesthesiologists in Baltimore on "The Treatment of Acute Clinical Emergency."

Dr. Robert G. McCorkle, Jr., has been named the year's outstanding surgical house physician at George Washington University Hospital. The selection is made through secret ballot by fellow interns and resident physicians. This distinction gives the select the privilege of a two weeks' visit, with expenses paid, to an institution of his choice, which, for Dr. McCorkle, will be the Massachusetts General Hospital and Lahey Clinic in Boston.

Dr. McCorkle received his medical degree from Baylor University in 1946. After a year's internship at Santa Rosa Hospital, he was inducted into the Navy and served on the surgical service of the U. S. Naval Hospital in San Diego, Calif. In July 1949 he came to George Washington Hospital as a resident physician in surgery. He is a Resident member of the District Medical Society.

The following physicians have moved from Washington and have resigned their Associate membership in the Medical Society:

Dr. Robert L. Brickhouse, whose address now is 301 Rivermont Avenue, Lynchburg, Va.

Dr. Alvin J. Cummins, on the staff of the Hospital of the University of Pennsylvania in Philadelphia, where he plans to remain indefinitely.

Dr. Paul Heller, who is with the Veterans Administration Hospital in Omaha.

A former Active member of the Society, **Dr. Barbara Moulton,** has transferred to Associate because she is now practicing in Normal, Illinois. Her address is 815 South Fell Avenue.

CALENDAR OF SPEAKERS

The following members of the Medical Society of the District of Columbia have addressed lay groups during the past several weeks. The Society maintains a Speakers Bureau, sponsored by the Committee on Public Relations, through which requests for speakers for lay groups can be filled.

Date	*Speaker*	*Subject or Title*	*Organization*
January 16	Dr. William P. Argy	Cerebral Palsy: a General Survey	D. C. Society for Crippled Children, Inc.
January 16	Dr. Winfred Overholser	Mind and Its Behavior	Science Forum of Unitarian Laymen's League
January 22	Dr. Richard H. Fischer	Pregnanediol	D. C. Society of Medical Technologists
January 30	Dr. Julius Schreiber	Danger Signals in Child Behavior	Potomac Association of Co-operative Teachers
February 4	Dr. Cyril A. Schulman	Early Cancer Detection	Michigan Park Citizens' Association
February 20	Dr. Victor Alfaro	Oto-rhino-laryngological Aspects of Cerebral Palsy	D. C. Society for Crippled Children, Inc.
March 5	Dr. Oscar B. Hunter, Jr.	Etiological Factors in Cerebral Palsy	D. C. Society for Crippled Children, Inc.
March 10	Dr. Sidney Berman	The Challenge of Adolescence	Alice Deale Junior High School Parent-Teachers Association

Roger Morrell, a sophomore student at George Washington University School of Medicine, was the second prize winner in a medical essay contest sponsored for medical students in the United States and Canada by Schering Corporation. The contest is held yearly for the purpose of encouraging research in medical literature. The topic assigned for the essays this year was "The Use of Steroid Hormones in the Treatment of Arthritis."

Mr. Morrell, who is the son of Colonel and Mrs. Jacque C. Morrell, of 8 Oxford Street, Chevy Chase, Md., was presented with a check for $500 in the office of the Dean of the School of Medicine, Dr. Walter A. Bloedorn. The check was awarded to Mr. Morrell on February 13 by Dr. M. William Amster, of Bloomfield, N. J., Chairman of the Awards Committee.

"Having a Baby," by Ruth Carlson, is the title of a new pamphlet (No. 178) in a series of pamphlets published by the Public Affairs Committee, Inc., a nonprofit, educational organization with offices at 22 East 38th Street, New York 16, N. Y. The pamphlet sells at cost, 25 cents a copy. Illustrated with pen and ink sketches, it presents the subject in cheerful discourse. It was prepared in coöperation with the Maternity Center Association. An excellent reading list is included.

BOOK REVIEWS

Dementia Praecox or The Group of Schizophrenias. Eugen Bleuler, M.D. Translated by Joseph Zinkin, M.D. Foreword by Nolan D. C. Lewis, M.D. Price, $7.50. Pp. 548. New York: Internat. Univ. Press, 1950.

Dementia Praecox: The Past Decade's Work and Present Status—A Review and Evaluation. Leopold Bellak, M.D. Foreword by Winfred Overholser, M.D. Price, $10.00. Pp. 471, with illustrations. New York: Grune & Stratton, 1948.

Every year about 18,000 new cases of poliomyelitis attack our population. The disease is of such a devastating character and is fraught with so many tragedies that universally papers give a great deal of attention to it. Local papers report carefully every new case of polio. The fate of the victims appears to be a matter for all to be concerned over, for everyone feels he may be the next victim. Yet there is another disease, not physical but mental, which attacks every year a much greater number of victims, and the effects are even more tragic and more devastating than those of polio. This is the disease schizophrenia, commonly known as dementia praecox. While many cases of polio can recover without any particular residuals, and probably acquire immunity against further attacks, it is rare for schizophrenia to subside without leaving some evidence of the attack, and the chances of recurrence are very great. Many patients with schizophrenia remain in the hospital, a responsibility of the community and a tremendous burden on the taxpayers, but, more important yet, an emotional strain on the family of the patients involved.

When Bleuler's Textbook of Psychiatry first appeared, it was a welcome addition to psychiatric literature because it was considerably different from the formulation given by Kraepelin. For the first time psychology was approached from a purely psychiatric point of view and, therefore, differed both from the conventional view of Kraepelin and the Wundtian psychology which held sway at that time. Bleuler's Textbook was, however, not available to English-speaking people until 1923, when the late Dr. A. A. Brill, an erstwhile pupil of Bleuler, gave the English-speaking public a translation of the book. The reviewer recalls that on the appearance of it, he told Brill that his next obligation should be the translation of Bleuler's Schizophrenia, since that this would be a great stimulus to further work on schizophrenia. This, however, Brill failed to do, and it was not until a year ago that the translation of Bleuler's Schizophrenia by Dr. Zinkin appeared in English. The translation may be recorded as a milestone in American psychiatry.

The discussion of the accessory symptoms in Chapter II calls attention to many somatic manifestations incident to schizophrenia. It is Bleuler's belief that when one considers all the somatic symptoms in their totality, they suggest that the disease is based upon more fundamental alteration of the brain or perhaps even of the entire body, a view which is not shared by many leading psychiatrists. He records his observation of the increase in brain weight in proportion to the skull size, and even choked discs and pupillary disturbances. At times the bodily state may resemble that seen in severe infections, while the severe psychic symptoms are sometimes reminiscent of those due to increased intracranial pressure. He points out that in acute catatonic states particularly we often find a coated tongue, anorexia (even without psychogenic refusal of food), and poor assimilation of food; thus it sometimes happens that the patient's physical and nutritional condition deteriorates rapidly, quite independently of any motor strain; the movements become tremulous. Often such conditions are accompanied by a slight rise of temperature. Up to 5 per cent of albumin in the urine has been found in stuporous cases. Amenorrhea is frequently observed in catatonic stupors. There may also be found marked fluctuations in weight without any definite relationship, especially to improvement, in the patient's mental condition. Food intake, as well as general intestinal activity, is dependent in schizophrenia to the highest degree upon psychic factors. Delusions of poisoning, negativism, autism, agitation, etc., often prevent or render these activities difficult. A high degree of oligemia or chlorosis has been found in some catatonic states. Definite abnormalities have been established in the studies of white blood cells. Disturbances in cardiovascular functions have been observed. Even in quiet periods the pulse rate is quite variable, while in acute states the pulse variations may be great and quite sudden. It is not unusual to find that a paranoid patient who is developing catatonic symptoms has a pulse rate which changes abruptly several times during a single observation, e.g., from 80 to 130, without any apparent reason. The vasomotor system may be markedly altered. In catatonic conditions lividity and cyanosis are very common, not particularly in the hands and feet but also in other areas. The tendency to edema is usually ascribed to poor circulation, but it must also have other causes. We find edema without demonstrable passive congestion, and, conversely, marked degrees of passive congestion without edema. Patients also often develop edema of the ankles and legs and this perhaps is not so surprising when one recalls that patients stand for decades. Besides edema, other trophic disturbances which may be related to the vasomotor system are found in schizophrenia. The fragility of the blood vessels, which may appear in many cases of acute and chronic schizophrenia, seems to indicate a real vascular lesion. From here we could go on mentioning a great many other somatic disturbances, such as disturbances in the function of the sweat glands, osteomalacia, bone fragility, etc. Just what the connection is between these symptoms and psychosis is as yet undetermined. Sleep is habitually disturbed; impotence and frigidity, spasms and intensifications of idiomuscular contractions are quite common; fibrillary contractions are sometimes noticeable in the facial muscles.

Yet when all is said and done, the impression remains with the reviewer that schizophrenia as well as other mental diseases are basically psychogenic in origin. It is not difficult to see how continuous psychic preoccupation with bodily problems is bound to have its effect in producing functional disturbances which, if persistent and continued long enough, may well lead to organic changes, by which time the condition cannot be helped by psychotherapeutic encroachments. One knows cases of individuals who years before they developed gastric ulcer have been brooding, melancholy individuals distinctly of the nervous type with consequent hyperchlorhydria eventually leading to ulceration. At like level are physical and psychic manifestations in mental diseases. The schizophrenia that attacks elderly people, such as arteriosclerotic psychosis or senile psychosis, is basically not different from the psychosis that attacks younger people. In the former case there may seem to be a physical background in the hardening of the blood vessels or deterioration of the parenchyma of the brain. These may be the immediate precipitating factors, but by no stretch of imagination could we connect the hardening of blood vessels and the softening of the parenchyma if it were not for the appearance of delusions—more particularly their nature and content. What these physical factors did was merely to bring to the surface underlying psychologic situations, essentially pathologic in nature, which had been lying dormant as long as the body integrity was not involved, but with the weakening of the physical defenses these factors came to the surface and gave rise to the mental symptoms. Take such a typically organic brain disease as dementia paralytica; there is no doubt here of the physical destruction of the brain tissue. The frontal lobes are phylogenetically the latest to develop and, therefore, the first to suffer from the attack of cerebral lues, but no amount of spirochetosis can explain the mental content found in these patients: the grandiosity in one case, the stupor in another, the deterioration in a third case, and so on. For the explanation of this we have to go back to the earlier life of the individual, to his fears and dreads, to his wishes and ambitions, to his entire personality.

Bleuler's book appeared in 1911 and it wasn't translated into English until recently. The edition offered is an exact translation of what we knew of schizophrenia in 1911. Much new has been added to our clinical knowledge of the condition, and this is taken up most competently by Dr. Bellak's book. Dr. Bellak's work brings the material up to date and additionally discusses a number of features not touched upon by Bleuler. This concerns modern treatment of schizophrenia: insulin therapy, use of metrazol, electric shock treatment, as well as the psychologic and psychotherapeutic studies. A full chapter is given to psychotherapy, which we do not find in Bleuler's, and another chapter to discussion of dementia praecox in childhood. Bellak's book has an immense number of references, and it was quite a remarkable feat to bring the best of the material extant between the covers of one book. It is a book from the reading of which every physician could profit.

Ben Karpman, M.D.

An Atlas of Normal Radiographic Anatomy. Isadore Meschan, M.A., M.D., Professor and Head of the Department of Radiology, University of Arkansas School of Medicine, with the assistance of R. M. F. Farrer-Meschan, M.B., B.S. (Melbourne, Australia). Price, $15.00. Pp. 593, with 1044 illustrations on 362 figures. Philadelphia: Saunders, 1951.

This is an excellent volume for students, interns, residents, and general practitioners since the author has written and illustrated his work with that purpose in mind. As stated in his preface, he includes: (1) basic morbid anatomy as it is applicable to radiography; (2) the manner in which the routine projections employed in radiography are obtained; (3) a concept of the films so obtained; (4) the anatomic parts best visualized on these views; (5) changes with growth and development; and (6) some of the more common variations of normal. He gives a brief discussion of the mechanics and physics of the production of X-rays and films. Each area is discussed with reference to the relation of the various structures and the necessity for the various views that are part of the radiologist's armamentarium. Special studies, including the use of radiopaque material, are briefly discussed, indications and contraindications being stated.

This book was not written for the radiologist's use but should be a part of every student's, intern's, or resident's library, since it so well fills a void in a field in which they have had so little study and training.

Sigmund Newman, M.D.

RALPH ANDRE QUICK, M.D.
(1882–1952)

Dr. Ralph A. Quick, practicing physician in Arlington County, Virginia, for more than 40 years, died suddenly, January 20, 1952, at his home, 4725 North Rock Spring Road, Arlington, Va.

Dr. Quick was born in Ashburn, Loudoun County, Virginia, September 21, 1882. He attended public schools in Washington and graduated from old Central High School. He received his medical degree from George Washington University in 1908.

Following graduation Dr. Quick opened his offices in Clarendon, Virginia, where he practiced continuously until his death, except for a tour of service with the American Red Cross in Europe during World War I.

He was a Fellow of the American Medical Association and a member of the Arlington County (Virginia) Medical Society and the George Washington University Medical Society. He had been an Associate member of the District Medical Society since 1936. He was also affiliated with the Columbia Lodge No. 285, A.F. and A.M., the Kiwanis Club, and the Clarendon Baptist Church.

Surviving are his wife, Mrs. Myrna Miles Quick, a daughter, Miss Jeanne A. Quick, both living at home, and a son, John G. Quick, who resides at 6119 North 12th Street, Arlington. He also leaves two sisters, Mrs. Christine Sramek and Mrs. Mary Bowman, and a brother, G. Willard Quick, all of Arlington.

HOWARD HENRY HOWLETT, M.D.
(1883–1952)

Dr. Howard H. Howlett, first physician to practice in Silver Spring, Maryland, died January 19, 1952, at his home, 928 Sligo Avenue, Silver Spring, after an extended illness.

The son of John Henry and Jane Elizabeth Howlett, Dr. Howlett was born, November 8, 1883, in Washington, D. C. After graduating from the public schools of Washington, he studied medicine at George Washington University, receiving his degree in 1907. He practiced medicine in Walkerton, Va., for five years and then moved to Silver Spring, where he was the only physician for several years.

During World War I he was regimental surgeon with the 61st Infantry, 5th Division, and with the 84th Division. His duties took him to France and Belgium; he also served with the Army of Occupation in Luxemburg and Germany from 1917 to 1920. He was commissioned Captain in the Regular Army in 1920 and assigned to Walter Reed Hospital, where he remained until he resigned his commission two years later. Thereafter he resumed his practice as a general practitioner in Silver Spring; he became ill about 10 months ago.

Dr. Howlett had courtesy privileges at most of the Washington hospitals. He was a member and Past President of the Montgomery County (Maryland) Medical Society. He was a Fellow of the American Medical Association, the Medical and Chirurgical Faculty of Maryland, the Southern Medical Association, the George Washington University Medical Society, and the Silver Spring Academy of Medicine. He was elected to Associate membership in the Medical Society of the District of Columbia in 1927.

Dr. Howlett was also a member of a number of fraternal organizations, including Silver Spring Lodge No. 215, A.F. and A.M., Maryland Royal Arch Chapter No. 38, Silver Spring Lodge, B.P.O.E., the American Legion, and the Washington Branch of the Fifth Division Society, U.S. Army.

The only close survivor is his wife, Mrs. Lina Walker Howlett, of the home address.

WILLIAM EDWARD TORREY, JR., A.B., M.D.
(1919–1951)

Dr. W. Edward Torrey, Jr., who only last year resigned his membership in the District Medical Society after moving to Moorestown, New Jersey, died, December 29, 1951, following injuries received in an auto accident the evening of December 26, when his car was struck by a motorist fleeing police. The tragedy occurred just outside the Burlington County Hospital in Mount Holly, N. J.

Dr. Torrey was born in Philadelphia, Penna., April 2, 1919, the son of W. Edward and Elsie Gordon Torrey. He received both his A.B. and M.D. degrees from the University of Pennsylvania, the latter in 1943.

Immediately following his graduation from Medical School, Dr. Torrey accepted a commission as Lieutenant in the Medical Corps of the U. S. Navy, where he served during World War II, from 1943 to 1947. He interned at the U. S. Naval Medical Center in Bethesda for a year, in the course of which he studied tropical medicine and epidemiology at the Medical School. He was assigned to submarine-diving duty as a medical specialist and served in both the Atlantic and Pacific theatres of action.

In 1947, after being discharged from the Navy, he became associated with Drs. Jacob Kotz and Morton S. Kaufman in the Columbia Medical Building, specialists in obstetrics and gynecology. He continued his training in this specialty as resident physician at the Pennsylvania Hospital in Philadelphia.

Dr. Torrey was an Active member of the Medical Society of the District of Columbia in 1948, and an Associate member from 1949 to 1951. He was a Fellow of the American Medical Association, and a member of the American Physicians' Art Association and the Piersol Anatomical Society of the University of Pennsylvania.

Dr. Torrey leaves his wife, Mrs. Carrieanna Frye Torrey and three small children. His home and office were located at 244 West Main Street, Moorestown, N. J.

Enzymatic Débridement of War Wounds—Spittler et al

(*Continued from page 135*)

to be little difference in the effect of SK-SD and trypsin in the type of wound treated in this series.

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Educational Program in Pharmacy—Bliven

(*Continued from page 168*)

credited as a Class A school by the American Council on Pharmaceutical Education.[1]

A program of limited enrollment is dictated by the capacity of the laboratories. In addition to the usual credentials, a series of predictive tests and an interview, as outlined above, are required of all applicants who are eligible for admission on the basis of their previous scholastic achievements.

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[1] Accreditation Manual, 5th ed. Chicago: The American Council on Pharmaceutical Education, 1951.

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DYSTOCIA DUE TO FETAL ABNORMALITIES[*]

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DYSTOCIA due solely to abnormalities of the fetus occurs infrequently. For that reason few comprehensive reports are available. In general, only isolated case reports have appeared in the literature. During the past 3 years several instances of dystocia due to fetal abnormalities have been encountered at the Gallinger Municipal Hospital and the George Washington University Hospital. Some of the more interesting of these problems will be presented.

A general classification of this type of dystocia is as follows: (1) dystocia due to excessive size of the fetus, (2) dystocia due to abnormalities of presentation, (3) dystocia due to single monsters and that related to abnormal enlargement of the body of the fetus, and (4) that concerned with double monsters.[1] The problem of severe polyhydramnios is also considered, because approximately 50 per cent of all patients with that condition will have anomalous infants.[2] In this presentation each of the foregoing types of dystocia is discussed with the exception of dystocia arising from malpresentations of normally formed fetuses.

Excessive Size of the Fetus

The most common form of dystocia to be considered is that due to excessive size of the fetus. In many instances the large fetus may not be normal, since the condition is common in infants of diabetic or prediabetic mothers,[3] or when erythroblastosis is present. However, the majority of infants weighing over 4,500 grams (9 lbs. 14 oz.) are normal except for excessive size. Predisposing factors are large parents, multiparity, advancing age and rarely prolonged pregnancy.[4] The most important cause is probably that of excessive growth during a normal period of gestation. The exact cause for the increased development is unknown. In almost all instances in which difficulty is encountered in women with normal pelves the most serious dystocia occurs with the shoulders of the fetus. In infants of excessive size the shoulder circumference may be greater than a similar measurement of the fetal head. With a large fetus the head may be delivered with reasonable ease, but it may be extremely difficult or impossible to deliver the shoulders without serious damage to, or death of the infant.[5]

It is essential that the diagnosis of a fetus of excessive size be made prior to the delivery of the head. Aids in establishing the diagnosis are (1) a history of diabetes, the possibility of erythroblastosis, or a history of previous large infants, (2) apparent excessive size of the infant upon abdominal palpation in the absence of polyhydramnios or twins, and (3) failure of fetal descent in a patient with a normal pelvis who is having satisfactory labor. The diagnosis by means of X-ray films alone may be misleading. However, if the pregnancy has been prolonged, particularly in a large or obese patient, and if the fetus shows evidence of large size and hyperflexion by means of X-ray films, one must consider the possibility of an oversized fetus.[6] Postmaturity in itself is no indication that the fetus will be of abnormal size.[7]

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[*] Delivered at the Twenty-second Annual Scientific Assembly of the Medical Society of the District of Columbia, October 3, 1951.

The only effective treatment of shoulder dystocia is its prevention. In most instances in which shoulder dystocia has occurred, however, hindsight points out the fact that at some time during the course of labor cesarean section might well have been considered. Only rarely is cesarean section employed with a large fetus as the indication.

When shoulder dystocia occurs, all of one's obstetrical ingenuity must be used if a normal living infant is to be delivered. Various manipulations aimed at rotation of the fetus in an attempt to deliver one shoulder have been advocated. If one shoulder can be delivered, usually the posterior, the second shoulder ordinarily can be delivered with relatively little more effort. Occasionally cleidotomy may have to be employed, but such a procedure should have decreasing acceptance.

With antenatal fetal death, shoulder dystocia is greatly increased because of the lack of tone in the fetal body, which interferes with the expulsive efforts of the uterus. Rigor mortis of the fetus, which on rare occasions manifests itself after an intrauterine demise, is an obvious cause of shoulder dystocia.

Whenever dystocia is encountered after delivery of the head, one must be aware of the possiblity of a monster. The latter diagnosis can be established by getting an examining hand past the impacted shoulders (if such is possible), or by means of X-ray films. Shoulder dystocia must be avoided rather than treated. When it does manifest itself the fetal loss is excessive. The presence of serious birth injuries is high in the infants who manage to survive the manipulations necessary to free the shoulders.[6] The more liberal but judicious use of cesarean section when treating patients with fetuses of excessive size will save many infant lives, and will prevent an untold amount of physical and psychic trauma to the mother. Following a traumatic delivery of an oversize, stillborn fetus, voluntary sterility occurs in many marriages.

Single Monsters

One-half to 1 per cent of all newborn infants have 1 or more congenital anomalies.[8, 9, 10] The incidence may be higher than that in patients with toxemia of pregnancy,[11] or those with twins.[12] Most of the anomalies of single monsters are concerned with the central nervous system. Anencephaly, hydrocephaly, microcephaly, and spina bifida are the most common disorders. Of extreme importance is the fact that in many fetuses a combination of anomalies is found.

With microcephaly, dystocia is usually absent. With anencephaly, dystocia relative to the fetus itself is uncommon, but instances have been reported where shoulder dystocia has been a factor. The latter may be caused by an incompletely dilated cervix which allows the small head but not the shoulders to descend, or by true shoulder dystocia as a result of excessive development of the body of the fetus.

The infant with spina bifida may occasionally be a source of major difficulty. The finding of a spina bifida during the course of a breech delivery should automatically warn one of the likelihood of hydrocephaly in the same infant, for 16 per cent of infants with spina bifida have an associated hydrocephalus (fig. 1).[10]

The hydrocephalic fetus occasions the most concern. One must be sure of the diagnosis before the institution of any treatment, and the diagnosis is at times difficult to make. The latter is particularly true when the fetus presents as a breech, as it does in about 30 per cent of the cases.[13] With the distended head presenting, the diagnosis is more apt to be made than if the breech presents. In prenatal examinations disparity between the enlarged head and the pelvic inlet may manifest itself rather early. In later pregnancy hydrocephaly should be kept in mind when the head cannot be made to descend into the pelvis. Pelvic examination may reveal open suture lines and bulging fontanelles as well as easy compressibility of the cranial vault. An additional diagnostic point is that with a hydrocephalic head the suture lines may spread during a uterine contraction instead of approximating, as is customary.

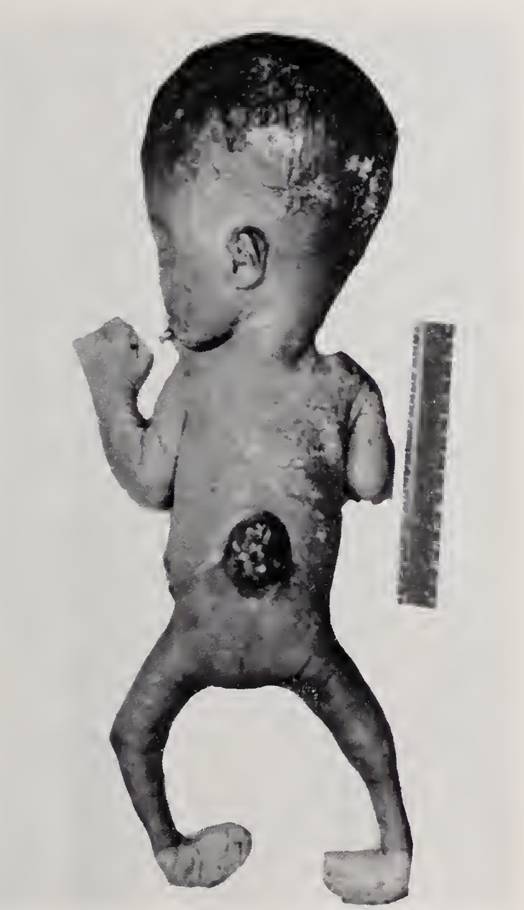

FIG. 1. Stillborn infant with multiple congenital defects, including hydrocephalus, spina bifida, exstrophy of the bladder, congenital absence of the external genitalia, and bilateral talipes varus. Breech presentation; delivered without decompression of the aftercoming head. Birth weight, 5 lbs. 8 oz. (2,495 grams).

Extreme enlargement of the head makes the diagnosis easy. With breech presentations, the disorder is less apt to be noticed during early examinations. The diagnosis of hydrocephaly by X-ray examination is more difficult with breech presentation because of the possibility of greater divergent distortion. Disparity between the outline of the thin skull and the facial features, gaping suture lines, and a globular shape of the head will help to establish the X-ray diagnosis even when marked distortion is present.[14]

That the uterus may rupture before or during labor from overdilatation of the lower uterine segment must be constantly kept in mind in the management of the patient with a hydrocephalic vertex presentation.[15] Ordinarily the patient may be allowed to go into labor, and after effacement and partial dilatation of the cervix has occurred the excess cerebrospinal fluid may be removed by doing an intraventricular tap with a trocar or a spinal needle. Such may be done without interfering with any religious principles.[16] After an adequate amount of fluid has been released a Willett clamp with an attached $\frac{1}{4}$ lb. weight may be applied to the fetal scalp to assist in the descent of the decompressed head. In cases in which the fetal head is extremely large the tap may have to be done through a relatively undilated cervix. Version and extraction of a hydrocephalic fetus is not only unnecessary, but rupture of the already thinned-out lower uterine segment may result from such manipulations. Cesarean section is rarely if ever indicated in a patient who has a known hydrocephalic infant, since the delivery can be more safely accomplished through the birth canal.

If the hydrocephalic infant presents as a breech, labor may be allowed to commence normally and the delivery of the fetus to the head carried on in the customary manner. If one is unable to deliver the aftercoming head, a needle or a trocar may be introduced through the palate or through the occipital plate and the cerebrospinal fluid released. Either maneuver is not difficult, but perforation through the palate is the easier of the two. After decompression the aftercoming head usually is no longer a dystocia problem. It is reëmphasized that one must be aware of the high incidence of hydrocephalus in fetuses presenting by the breech with defects of the spinal nervous system.

The other condition encountered in this category is that of enlargement of the body of the fetus. This form of dystocia is quite rare. When it occurs it is usually due to an atresia of the lower urinary tract, to congenital polycystic kidneys, or to marked ascites in the hydropic form of erythroblastosis. The diagnosis may be made by means of X-ray films in selected instances from the "Buddha-like posture" of the fetus (fig. 2).[17]

When delivery of the infant is impossible after the head or the feet have been delivered, the treatment of choice is aspiration of the distended bladder or of the abdomen. If the head has been delivered it may be quite difficult to accomplish such a procedure. In some cases eventration may have to be done after the fluid has been aspirated. In such cases the greatest concern should be directed to the mother, since in practically all of the conditions producing this anomaly normal postnatal life for the infant is impossible.

DOUBLE MONSTERS

A double monster is delivered so infrequently that few obstetricians encounter such a specimen during a lifetime of practice. In general, the literature contains only isolated instances of their occurrence.[18, 19] The recent literature is devoid of any large series of such infants occurring in any one hospital. Premature labor usually occurs in the presence of double monsters. For that reason dystocia from this type of defective fetus occurs infrequently. In those cases in which the combined fetal mass has attained considerable size, delivery through the birth canal may be totally impossible. In the greatest majority of patients with this condition the antepartum diagnosis can only be made by means of X-ray films. All patients in whom a multiple pregnancy is suspected and any patient who has an apparent polyhydramnios should have antenatal films of the abdomen. The diagnostic features of double monsters in X-ray films are (1) the fetal heads at the same level, and (2) the fetal spines closely parallel or convergent and not deviating from their fixed alignment. With a normal multiple pregnancy the heads usually are at different

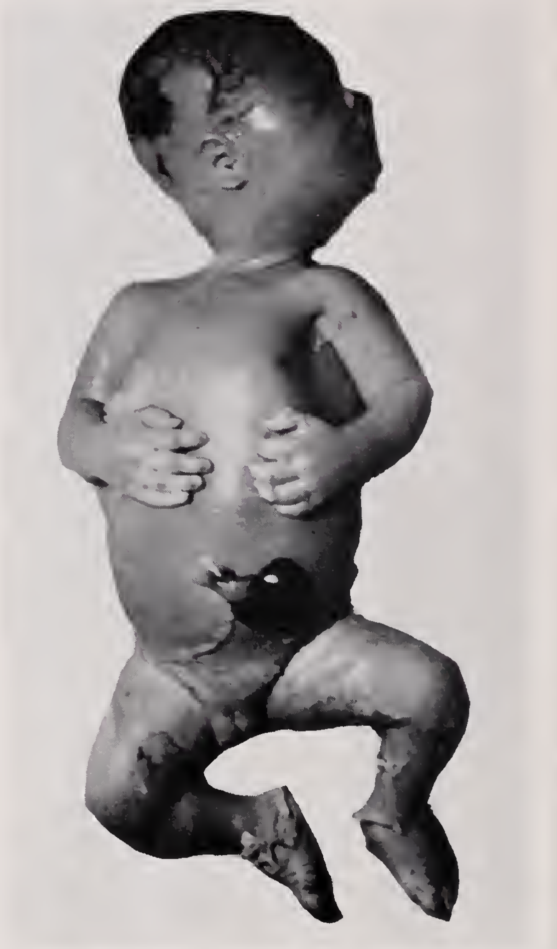

FIG. 2. Infant with erythroblastosis showing the typical "Buddha-like" position of the forearms and hands on the distended abdomen. Birth weight, 9 lbs. (4,082 grams).

levels, and the spines, if parallel, are far apart. The spines may also be found in different relative positions on different films with normal multiple pregnancies.

The treatment of the patient with a known monster depends primarily upon the size of the anomalous double fetus. As mentioned, most conjoined fetuses of this type cause little if any difficulty in delivery, because premature labor is initiated spontaneously while the size of the individual components is still small. If the pregnancy continues past the 34th week, serious dystocia may result. In some cases the size of the monster is not as important as the presentation or the specific type of monster. In figure 3 the specimen weighed only 5 lbs. 5 oz., but vaginal delivery was impossible because of the size of the combined shoulders. Figure 4 is that of another double monster which by virtue of its smaller size occasioned no difficulty.

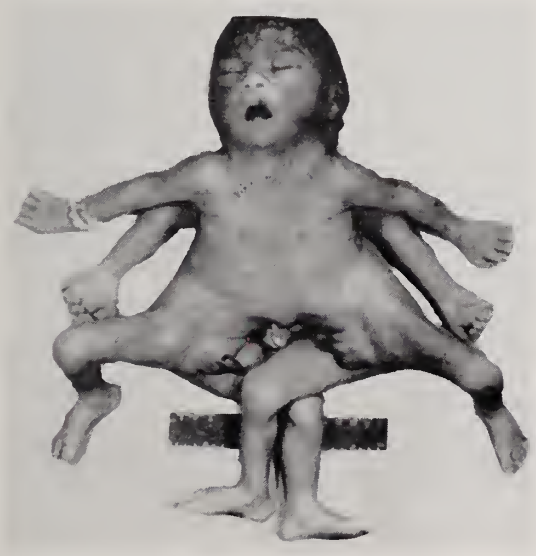

FIG. 3. Double monster. Birth weight, 5 lbs. 5 oz. (2,410 grams). Delivered by cesarean section because of dystocia caused by the duplication of the shoulders.

The most important consideration is that the diagnosis should be made prior to the onset of labor. All patients with a history of previous malformed infants, those with polyhydramnios, those with malpresentations, and those with suspected twins should be subjected to X-ray examinations of the abdomen. In the absence of polyhydramnios the presence of a monster is usually unsuspected. If the double monster is not too large, the patient may be allowed to go into labor, particularly if the feet are presenting. If the fetuses are large, cesarean section may be the most appropriate treatment. The patient who develops obstructive dystocia due to a monster is frequently more safely delivered by extraperitoneal cesarean section than by a destructive operation on the fetus. One further point in therapy is to refute the idea that labor should be induced as soon as the diagnosis of a monster or an anomalous infant has been made.[20] A normal onset of labor indicates that the proper time

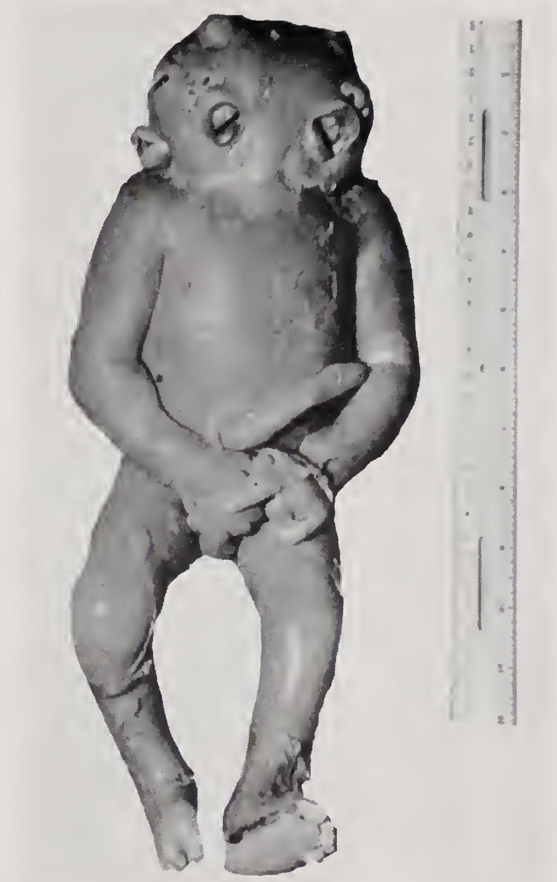

FIG. 4. Double monster. Birth weight, 4 lbs. 3 oz. (1,900 grams). Acute polyhydramnios, with spontaneous delivery following labor induced by release of most of amniotic fluid.

for delivery is at hand. Induced labor on the contrary is unpredictable. There is no reason to induce labor in the absence of acute polyhydramnios.

POLYHYDRAMNIOS

Polyhydramnios occurs frequently in the presence of fetal anomalies. The accompanying excessive fluid may be more of a problem than is the abnormal fetus. Acute polyhydramnios occurs only rarely.[21, 22] When present it may constitute an obstetrical emergency. The painful distention of acute polyhydramnios may be confused with premature separation of the placenta. If the patient is having respiratory and cardiac embarrassment, the excessive amniotic fluid must be released from the confining membranes. This can be accomplished by means of a trocar or a spinal needle piercing the membranes through the cervix. The most important point is that the fluid must be released slowly. One of the real dangers from a sudden decrease in intrauterine capacity is separation of the placenta. The release of several liters of fluid should require at least an hour. If the membranes are lacerated with a hook, instead of carefully punctured, the loss of fluid may be entirely too rapid. In this series abdominal aspiration of the amniotic fluid has not been attempted, although such aspiration has been recommended from time to time.[2]

When dealing with either chronic or acute hydramnios an X-ray film of the abdomen may not be conclusive because of the excessive fluid. If the films are inconclusive, a good practical idea is to repeat the film after the fluid has been released. In that way definite shadows may become readily apparent. The further management of the patient may be greatly simplified by virtue of the new information thus gained.

SUMMARY

1. Dystocia due to abnormalities of the fetus occurs infrequently.

2. The most serious type of dystocia with a fetus of excessive size is concerned with the delivery of the shoulders.

3. When shoulder dystocia does occur, the fetal mortality is excessive, disabling birth injuries are common, and the maternal morbidity is markedly increased.

4. The best method of treatment for shoulder dystocia is its prevention. Cesarean section may be indicated solely on the basis of excessive fetal size.

5. Anomalies of the central nervous system are the most common defect in malformed fetuses.

6. With single monsters, hydrocephaly is the greatest source of dystocia.

7. After decompression of the head hydrocephalic fetuses may be delivered through the birth canal without hazard to the mother.

8. Double monsters may cause serious dystocia by nature of their size, by their multiplicity of parts, and by their increased body mass.

9. Polyhydramnios is frequently found with anomalous infants.

10. Acute polyhydramnios, by its effect on the cardiac and respiratory system of the mother, may require immediate release of the excessive amniotic fluid.

11. Separation of the placenta may occur if the fluid is released too rapidly when hydramnios of a marked degree is present.

12. Repeat X-ray examinations after the release of the excessive fluid in polyhydramnios may be necessary to discover an anomalous fetus.

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THE MANAGEMENT OF ABNORMAL AND EXCESSIVE UTERINE BLEEDING

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ARTICLES appear regularly advising the use of sex hormones for treating the condition called "functional uterine bleeding." Estrogen, progesterone, gonadotropin and testosterone, alone or in various combinations, have their proponents in managing abnormal menstrual bleeding. It is unfortunate that such reports put the emphasis upon treatment of a symptom, abnormal bleeding, rather than upon the importance of arriving at a diagnosis. The term "functional bleeding" is not diagnostic, nor is it easy to define. As generally used it pertains to individuals manifesting abnormal bleeding in whom no obvious cause for the bleeding can be found. This report concerns the management of 336 women complaining of abnormal and excessive uterine bleeding, not associated with pregnancy, in whom pelvic examination failed to demonstrate any gross cause for the bleeding. It includes postmenopausal bleeding of any degree, intermenstrual bleeding that persists for 2 cycles or longer, and menometrorrhagia lasting longer than 3 months. All women in this group were subjected to diagnostic curettage with tissue report before any further attempt was made to classify or treat them and to biopsy examination of the cervix unless a healthy, unbroken mucosa was everywhere visible.

Accurate records of the exact occasion, frequency, and degree of bleeding are important in making a diagnosis. Women who are dubious about this and who will not keep a written record are not to be trusted. They may be falsifying for purposes of attention-seeking or for desire to have a hysterectomy for contraceptive purposes. Written records for the doctor are important too. Some women bleed excessively when they are under stress, and if this has been previously noted in the record it helps one to arrive at a diagnosis. Steady progression toward more and longer bleeding is significant. When the record shows lessening of the flow and shortening of the periods there need not be any concern, provided there is not some constitutional disorder present, such as hyperthyroidism. Secondary oligo-amenorrhea is occasionally seen in perfectly healthy, normal women and per se is no reason for concern or for hormone treatment.

Perhaps the most difficult feature to determine in this group is the degree of severity of the bleeding. For purposes of convenience for the record each individual included in the study is classed under 1 of 4 groups as indicated in table 1.

TABLE 1

Degree of Severity

Group 1.	Postmenopausal bleeding in any degree.
Group 2.	Intermenstrual bleeding, occasional spotty to continuous and scanty.
Group 3.	Menorrhagia moderate, not exceeding 4 days, with soaking of double pad in 1 to 3 hours.
Group 4.	Menometrorrhagia, severe, uncontrollable for 6 hours or longer in that the woman is unable to leave the house because she will drip through a double pad in less than 30 minutes, stains her clothes, floor and bedclothes and will have a gush of blood and clots when she strains at toilet. Any instance of excess bleeding persisting beyond 4 days or producing distinct secondary anemia.

In all, 24 women fall into the severe group 4, 44 in the postmenopausal group 1, and the remaining 268 about equally distributed in groups 2 and 3. Women in all 4 groups are advised to have a diagnostic curettage done promptly. When the woman delays this operation she is told bluntly that she is "playing Russian roulette with herself" and that further delay will not be condoned. Often a woman will object to being examined while she is bleeding, but if the bleeding continues week after week there is no alternative and the physician must be insistent.

In the group of 336 women manifesting no gross pelvic pathology on vaginal examination there has been a definite diagnosis made in 102 of them of a condition pertinent to the bleeding. This is shown in detail in table 2.

TABLE 2

Diagnosis

Malignant neoplasm	10
Nonmalignant neoplasm	16
Senile vaginitis	38
Emotional disturbance	22
Thyroid disorder	12
Purpura	2
Hypertension	2
	102

Of the 26 diagnoses of neoplasm, 10 were made by curettage and biopsy and 16 developed during periods of observation of from 1 to 4 years following the original examination and curettage as shown in table 3.

TABLE 3

Nature of Neoplasm

1. Discovered by curettage and biopsy:	
Submucous myoma	3
Adenocarcinoma (corpus)	6
Squamous Cancer (cervix)	1
	10
2. Discovered during subsequent observation:	
Fibromyomata	13
Cancer of ovary	3
	16

The 13 instances of fibromyomata were chiefly interstitial in type. All were ultimately subjected to hysterectomy. The 3 ovarian carcinomata occurred in women who were under periodic observation because of episodes of abnormal bleeding. In all 3 the first symptom was an uncomfortable abdominal enlargement, occurring in a few weeks. Diagnosis was suspected when progressive ascites and a lower abdominal mass were found. At laparotomy they were already in an advanced stage. One adenocarcinoma of the corpus was advanced when discovered because of the patient's delay. She had concealed her postmenopausal bleeding from her family for almost 2 years before her daughter noticed that blood stains were in her mother's bedclothes. The remainder of the malignant neoplasms were in an early and curable stage when the diagnosis was made. Four of these women complained of spotty intermenstrual bleeding persisting for 2 successive cycles. One had postmenopausal staining for 3 weeks. The 1 remaining is presented as case no. 1. The youngest of these 6 was 40, the oldest 54, and the average age 48.

Illustrative Cases

Case 1. A highly psychoneurotic unmarried woman aged 52 who had not had regular menses for over 10 years and who had taken 1 mg. of diethylstilbestrol daily for the past 10 years stated that about twice a year she had had an episode of bleeding which usually stopped within a week or 10 days after the drug was discontinued. On an office visit she reported that she had not taken the drug for 4 weeks and was still bleeding. Vaginal examination revealed nothing noteworthy. It was not convenient for her to enter the hospital at this time, and it was agreed to wait another 2 weeks. She was given intramuscular testosterone, 25 mg. 3 times weekly, to relieve her hot flushes which had recurred to a very annoying extent. At the end of another 2 weeks she was still bleeding in moderate degree and consented to a diagnostic curettage. Tissue obtained was scanty and gelatinous in consistency. It was reported as adenocarcinoma. This case is a good object lesson. When a woman is taking estrogenic hormone and begins to have excessive or prolonged bleeding the estrogen is usually responsible, but not always so. If bleeding continues for as long as 3 weeks after the drug has been discontinued, a diagnostic curettage is in order.

Case 2. The patient was unmarried and 63 years old. Menopause had occurred at the age of 45. At the age of 56 she began to have spotty vaginal bleeding and the curetted tissue was reported as nonmalignant. Over the next 6 years she continued to have episodes of spotty bleeding and had a total of 5 curettages. One year after the last one she was seen by me and was bleeding again. She was a tense, highly nervous person who was unable to relax for vaginal examination. She was scheduled for examination under an anesthetic and curettage at the same time. At this time there was seen a pronounced degree of senile vaginitis. Tissue obtained was moderate in amount and friable. It was reported as adenocarcinoma. Final report after hysterectomy was that the growth was limited mainly to the endometrium with just superficial invasion of the myometrium.

In these 336 women it has been thought necessary to repeat the curettage at approximately yearly intervals in several instances. Eleven women have had 2 each, and 2 have had 3 such operations, because of continuing or recurrent episodes of abnormal bleeding. Although not excessive they were thought to be sufficient to warrant another investigation.

There is a type of bleeding associated with ovulation that should be mentioned, although none of the cases in this study are of such nature. Occasionally a woman is seen who has a record of staining a little just about midway between menses, when ovulation is expected. When this has been present for some time and has not increased, nothing more than a periodic examination is warranted. If it is a recent development in a woman 35 or older, curettage should be employed to make sure it is nothing more. Another cause of intermenstrual staining and profuse periods is abnormal ovulation. Typically, when this occurs, lower abdominal pain develops at the time of ovulation. Subsequently spotty intermenstrual bleeding or a profuse and painful period will occur, or both the staining and the profuse period will be recorded. Examination of the woman usually reveals an enlarged and quite tender ovary. The condition is commonly misdiagnosed and treated as "inflammation" of the ovary. Actually it is due to a hemorrhagic follicle or corpus luteum hemorrhagicum and will subside spontaneously with expectant treatment. It commonly occurs in women under stress and occasionally after active coitus at ovulation time. Rarely the hemorrhage into and from the ovary is of sufficient degree to necessitate laparotomy.

Emotional factors undoubtedly influence many women's menses. The exact incidence of this is difficult to evaluate, because any woman having a tendency toward excessive bleeding will invariably have an increase in flow when she is under stress. In this series 22 women were discovered to have emotional problems which appeared to influence directly their bleeding. The physician not experienced in searching for emotional reasons, or unwilling to do so, will seldom find them. At times they are unmistakable. Such an instance is the woman with an overdue period and a fear of pregnancy. When she is told the pregnancy test is negative she will commonly begin a profuse and prolonged period. Another common cause is the auto accident, which often evokes a premature, profuse and prolonged period. Women unable to conceive who are put under pressure by their husbands and relatives will sometimes complain that they are having a "hemorrhage" with each period. They are so certain they have become pregnant each month that they try to convince everyone that they are having a miscarriage. Examination in such instances will usually show the amount of bleeding to be surprisingly small in comparison with the degree of complaint. On the other hand, it is amazing how long some can bleed excessively without their activities being greatly affected. The next 2 case reports show unquestionable emotional factors that superficially might not be evident.

ILLUSTRATIVE CASES

Case 3. Since the menarche at 14 this unmarried woman of 26 years has had regular spotty bleeding between periods. At the age of 24 she was hospitalized for 6 weeks for study with curettage, but nothing abnormal could be found. Two years later she was first referred for gynecologic consultation in this series after a complete diagnostic work-up, which, as before, had shown nothing organically wrong with her. She was advised not to worry about the bleeding and to return for reëxamination every 6 months. If the bleeding increased appreciably she was to return sooner. At this time she volunteered the information that overwork, worry and emotional upset would aggravate the bleeding temporarily. A year later she stated her intention of getting married in the near future and was fitted with a diaphragm at her request. Several months later she returned complaining that she had been bleeding constantly for over 2 months. The use of testosterone intramuscularly, 25 mg. every other day for 6 doses, had no effect upon the bleeding. A curettage was performed with the tissue reported as proliferative endometrium. The uterus, tubes and ovaries were always normal on examination. During the hospital stay she volunteered some interesting information. Her intermenstrual bleeding had begun just after her menarche with an emotional disturbance. Confined to bed for some illness, she had listened to her mother's distress in labor with an unwanted pregnancy in the next room with paper-thin walls. They were poverty-stricken at the time, and the mother, with little medical attendance and no analgesia, suffered a difficult and painful 2-day labor. As she recounted the experience many years later, it was obvious that it was still almost unbearable for her to think about. It is even more significant that her bleeding became continuous after she and her husband decided to have a child. After she stopped using her diaphragm the bleeding would not stop. Since she was bleeding she could not have sex relations and therefore could not become pregnant.

Case 4. The patient was married, 29 years old, and had 3 children aged 7, 5 and 3. Five months previously while living abroad, her husband was unexpectedly transferred back to this country, leaving her to follow with 3 children and the household goods, and without help. After arriving she moved again 3 times in as many months, each time to a different part of the country. At the beginning of this trek she began a menstrual period and just never stopped bleeding. In 4 months she had consulted 4 different physicians, each of whom gave her hormone injections. She arrived in Washington exhausted and nearly frantic about the bleeding. She was hospitalized and a curettage performed. The tissue was reported as benign secretory endometrium. Review of her earlier medical record from former residence here revealed the fact that she had once before evidenced a tendency to bleed excessively when under stress. She was reassured that if she rested up and recovered from her strenous travel ordeal no further treatment would in all likelihood be necessary. In any event there was nothing to be concerned about other than the annoyance of having to menstruate overly long. A day or so later the bleeding ceased, and several months have elapsed with entirely normal menses.

Twelve women in this study manifested some degree of thyroid disorder. Two had myxedema. Seven had no symptoms except profuse, prolonged menses. The BMR was normal in all 7. On a grain of thyroid extract daily their menses reverted to a normal cycle. Three women had hyperthyroidism and developed excess bleeding when treated with propylthiouracil. Stopping the use of the drug relieved the bleeding in 2. The other is reported as case 5.

ILLUSTRATIVE CASE

Case 5. The patient was married, 41 years old, and had 2 children aged 14 and 11. After 3 weeks' treatment with propylthiouracil she began a menstrual period which would not stop, even after the drug was discontinued. After 7 weeks of bleeding her hemoglobin fell to 42 per cent, and it was necessary to give a transfusion. Her thyroid dysfunction stabilized well, but she continued to have prolonged and excessive periods. Intramuscular testosterone, 75 mg. a week, had no effect upon the bleeding. She was ultimately relieved by a hysterectomy.

Thirty-eight of 44 women complaining of postmenopausal bleeding were found to have senile vaginitis in sufficient degree to be responsible for the bleeding. All responded promptly to local vaginal estrogen therapy.[1] Three had adenocarcinoma of the corpus as shown elsewhere in this article. Two women in this postmenopausal group have had intermittent spotty bleeding from a healthy-appearing cervical stump, left from previous subtotal hysterectomy. In both the remaining cervical canal has been explored carefully with a sharp curet under anesthesia but no tissue obtained. One woman aged 69 at present had both radium and X-ray treatments in her early forties for severe menorrhagia. Since then she has had about 4 to 5 menstrual-like periods of bleeding a year. Curettage on 2 occasions has failed to produce any tissue from a tiny, senile uterus. She is tremendously obese, has an enlarged heart, and her systolic blood pressure is well over 200. I believe there may be a connection between the hypertension and the bleeding episodes, which are definitely from the uterus and not from the vagina. One other woman in the study has a systolic pressure that averages 220, and I think it has a relation to her excessive menses.

Other etiologic factors exist. Two women in the study have definite thrombocytopenic purpura. Both manifest excessive menses and episodes of intermenstrual staining from time to time. These 2 are the only exceptions to the rigid rule of curettage in these cases. As long as their pelvic findings remain normal on examination the medical department has ruled out any surgery. Both are kept under close supervision. Inflammatory disease of the pelvis, both Neisserian and acid-fast is often reported elsewhere as a cause of excessive and abnormal bleeding. The former is rarely seen in this organization. In a 4-year period 3 patients were thought to have tuberculous salpingitis. All 3 responded so well to rest and streptomycin that surgical confirmation was not necessary. None of the 3 exhibited abnormal menses.

After excluding the individuals with definite diagnosis we have left a group of women for whom we have yet no explanation of the mechanism of the excess and abnormal bleeding. It is easy to slip on this group the label of "functional bleeding," "hyperplasia," or "irregular shedding of the endometrium," as is often suggested. Pathologic tissue reports of phases of the endometrium including both cystic and so-called atypical hyperplasia have had no bearing on the clinical management of this group, either in checking the bleeding or in indicating any certain individuals likely to develop true neoplasm in the future. Until our knowledge is much better than it is at present we must regard all such women as possible candidates for future neoplasm and use periodic examinations, with curettage when indicated, as the mechanism for early diagnosis. Furthermore, each woman usually proves to be a particular problem that does not lend itself readily to classification or management in a routine that has fixed and rigid rules. A typical person of this kind is between 35 and 45 years of age, has had 1 or more pregnancies, and has manifested a definite increase in bleeding which has persisted 6 months or longer. Pelvic examination has failed to reveal any gross lesions. Tissue obtained by curettage has been reported negative for cancer. What should be done next? Experience with this group has shown that patients with a mild to moderate degree of bleeding, groups 2 and 3, table 1, can be managed with periodic observation and the assurance that nothing serious will come of the bleeding except the inconvenience it occasions. Natural menopause will ultimately stop it spontaneously. Spontaneous remission will often occur without any treatment and sometimes follows the curettement. Even though at times the blood loss appears to be great, experience has shown that it seldom affects the blood count unless it is prolonged over many weeks. When decided secondary anemia is caused by the bleeding, the woman should be included in group 4, which includes patients with severe bleeding. Women with a known tendency to anemia must be watched carefully and have frequent blood counts made. Women with persistent severe bleeding, group 4, table 1, will require radical measures unless, providentially, as sometimes happens, natural menopause intervenes. Of the original group of 336, no definite etiology was found in 234 women for the bleeding. Of this latter group exactly3 2 have fallen in the severe bleeding group, and the bleeding has been terminated as shown in table 4.

TABLE 4

Type of Termination

Hysterectomy	5
Radium plus hysterectomy	2
Radium therapy	12
Deep X-ray therapy	4
	23

At no point in this study and in not a single individual case has there been any definite or logical indication for the use of sex hormones, with the one exception of estrogen locally for senile vaginitis. With rare exception the use of oral or intramuscular estrogen is not indicated in postmenopausal women. Many women in the three premenopausal groups with abnormal bleeding will insist on something "more" short of radical measures. As a placebo they may be treated with oral, sublingual or intramuscular hormones. Such therapy has yet to be proved to be more than on a trial and error basis. If one does not work another may be tried, or a combination of 2 or 3. Diethylstilbestrol,[2] hexestrol[3] and other estrogens in various types and dosage, together or separately with progesterone and testosterone, have been very disappointing in this respect. Estrogen often increases the bleeding. The apparent occasional success with hormones does not occur any more frequently than does spontaneous remission in women not taking them. Tremendously excessive doses of stilbestrol not only violate sound physiologic and pharmacologic principles but can produce violent bleeding when discontinued. On occasions testosterone, in doses up to 75 mg. weekly sublingually or intramuscularly, seems helpful. However, when help is needed badly, as in the next 3 cases presented, it appears to have little, if any, effect on the bleeding.

Illustrative Cases

Case 6. The patient was a married woman of 37 with 3 children aged 7, 5 and 3. For 5 months she had noticed intermenstrual bleeding which had increased with each cycle. A diagnostic curettage and biopsy of the cervix were performed, with tissue reported benign. After this the bleeding stopped for 3 weeks; then a period began and bleeding continued over the next 6 weeks, becoming more severe each week. She was readmitted to the hospital with a hemoglobin of 50 per cent. Treatment was the use of intramuscular testosterone, 25 mg. daily, for the next 7 days and transfusions as indicated. By the end of a week it had become necessary to administer 500 c.c. of whole blood daily just to keep up with blood loss, and a total hysterectomy was performed in order to check the bleeding. The uterus was found to be normal, grossly and microscopically.

Case 7. A married woman of 39 with 1 child aged 14 complained of 4 successive menstrual periods during which she flooded, twice excessively. A curettage was performed, and the tissue was reported benign. The next 3 menses were normal. After these she was hospitalized with a spinal injury resulting from a bad fall. In the first week she had an emergency operation for intestinal obstruction produced by a volvulus. Her convalescence was then further complicated by an infection of the abdominal incision resulting in a large abscess which had to be drained surgically. Just after the spinal injury she began to bleed moderately and never entirely stopped. Intramuscular administration of testosterone, 100 mg. weekly for 4 weeks, had no noticeable effect on the bleeding. After 5 weeks in the hospital she was sent home for further convalescence. At this time she was weak, looked washed-out, and was still bleeding. She was put on ferrous sulfate, 9 grains daily, and vitamin B-complex, 6 capsules daily. The bleeding continued without respite for another 2 months, after which she was put back in the hospital for transfusion. She was given an intrauterine radium treatment of 2,000 mg. hours of radium element. Three days later her bleeding ceased and she began to recover from all the misfortune she had suffered. A year later, after she had fully recovered and was in good condition for another operation, she began to bleed again. After this persisted for 3 weeks a total hysterectomy was performed, from which a speedy recovery was made.

Case 8. A married woman aged 47, with 1 child aged 17, was seen with the complaint of progressive menorrhagia of 6 months' duration, the last 2 menses being severe. A curettage was performed, and the tissue obtained was reported benign. She continued to have excessive menses which were unaffected by the oral administration of 30 mg. of Pranone daily, beginning a week before a period was due and continuing until it was finished. Hysterectomy was advised, but the patient was unwilling to have the operation performed. She was not seen for 4 months and was next heard of when a physician who had seen her at home phoned requesting that she be hospitalized as an emergency. Four weeks before, she had completed a course of deep X-ray treatments to her ovaries. After this she bled continuously and excessively and became very weak. On admission her hemoglobin was approximately 30 per cent. Repeated transfusions of whole blood were administered until the bleeding subsided and her blood picture stabilized, approximately 3 weeks. The first week in the hospital she was given 50 mg. of intramuscular testosterone daily with no apparent effect on the bleeding. She developed a slight huskiness of the voice and a few months later showed a slight but definite growth of coarse hair on her face.

This last patient is the only one in the study in whom the use of testosterone caused masculinization; however, the dose was excessive. If a maximum of 75 mg. weekly is adhered to and not administered more than 2 weeks in succession, there should be little danger of this. It is a good rule always to inform the patient before treatment that it is the male sex hormone and that prolonged or excessive doses can result in masculinization. It should not be used in women with any degree of acne, since even in small doses the skin condition will become worse. Several instances of mild degrees of hirsutism have been seen in dark brunettes treated over several months with sublingual metandren for dysmenorrhea. This tendency does not appear to be as pronounced in blondes. The physician had best remember that increase in hair scarcely perceptible to him may be considered quite a blemish by the woman.

The controversy of radiation versus surgery in managing the severe types of bleeding need not be discussed in great detail. Each has its adherents, and each has advantages and disadvantages. In the poor surgical risk radiation is usually preferable. For a busy working woman who does not want to take several weeks out of her schedule it is the most convenient. In nonobese patients who are good surgical risks and in all younger women for whom preservation of the ovaries is desired elective total hysterectomy is the usual treatment of choice. Both surgery and radiation are radical measures, and we must be certain that their use is justified. The indication is the degree of inconvenience the excess menses cause the woman.[4] We must be careful not to allow the woman or the physician to exaggerate this inconvenience.

Since the final result of irradiation on normal tissue is not clearly known, women so treated must be followed at intervals for the remainder of their lives. It is the duty of the physician to impress them with the importance of this. Occasionally X-ray treatment appears to aggravate the bleeding as was seen in case 8. The incidence of constrictive senile vaginitis appears more common following X-ray therapy.[1] This increase is explainable by the fact that the vaginal vault is within the "target" area and may receive maximum exposure to the rays. Neither of these disadvantages appears to be true for intrauterine radium administration in doses not exceeding 2,000 mg. hours. Neither form should be used until a negative tissue report for cancer has been obtained by diagnostic curettage. The use of radiation, particularly intrauterine radium, without this protection has been repeatedly shown to mask symptoms of an already present malignant growth. After radiation some women continue to stain a little at the time a period is due. If it is no more than this, nothing need be done other than periodic examinations. Occasionally moderate to severe bleeding begins again, as reported in case 7. In such an instance surgery is preferable to further radiation, unless the patient is a very bad risk. Finally, no physician should ever use deep X-ray or radium therapy unless he has had sound and adequate training and experience in the principles of radiation and the indications for treatment. Any physician who violates this rule is not acting in the interest of the patient or of himself, and when he does, irreparable damage to someone will result sooner or later.

SUMMARY

1. In this group of 336 women complaining of abnormal and excessive uterine bleeding and not manifesting any diagnostic findings on vaginal examination, further study resulted in a diagnosis pertinent to the management of their individual problems in 102 instances, 10 of which concerned malignant neoplasms.

2. The single most important diagnostic procedure is the exclusion of malignancy by obtaining tissue study through the use of curettage and biopsy.

3. Sex hormones have been of little, if any, value in therapy in this group with the single exception of local use of estrogen for senile vaginitis.

4. Hysterectomy, or irradiation, or both, has been required to control the bleeding in 37 individuals (11 per cent).

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THE PATHOLOGIC ANATOMY OF DEGENERATIVE SHOULDER LESIONS

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IN RECENT years our concept concerning the nontraumatic painful shoulder has undergone an "about face." In 1934 Codman[1] focused our attention on the fact that changes found in the subacromial bursa in cases of painful shoulder were secondary changes. Subsequent investigators proved conclusively that the onus of blame should be placed on the musculotendinous cuff and capsule as the etiologic agent in the painful shoulder.

The stability of the shoulder is maintained primarily by soft tissue structures. The most important structure is the articular capsule, which completely envelops the shoulder joint. It is remarkably loose, and this accounts for much of the free movement of the joint in all directions. The capsule is prolonged downward in the form of a fold in the ordinary dependent position of the arm. When the arm is abducted this fold becomes obliterated and the capsule tense. Synovial membrane lines the fibrous layer of the capsule. It extends from the margins of the glenoid cavity over the inner side of the capsule and covers the lower part and sides of the anatomic neck of the humerus, where it is reflected toward the margin of the articular cartilage of the humeral head. It is important to remember that the inferior aspect of the humeral head has the most extensive clothing of synovial membrane. On all aspects, except the inferior, the capsular ligament is supported by muscles, the tendons of which are more or less intimately connected with it. This intimate union of the tendons of the supraspinatus, infraspinatus, teres minor, and subscapularis converts them into supporting ligaments of the joint. The entire enveloping structure is generally called the capsulotendinous or musculotendinous cuff of the shoulder.

Withers[2] demonstrated that in the adult the capsule is fused with the overlying short rotator muscle. In infants the short rotator muscles are definitely separated from the underlying capsule by loose areolar tissue. Another interesting differential anatomic finding in infants is the length of the muscle fibers of the short rotator muscles, which extend nearly to their insertions in the tuberosities of the humerus, whereas the findings in adult are quite different. The tendinous portion of the muscle is much greater and in some instances extends medially to the suprascapular notch. It might also be mentioned that these findings are more evident in the superior portion of the cuff.

These heretofore rarely mentioned anatomic facts may shed some light on the degenerative processes that are seen in relatively young adult shoulders. It is common knowledge among surgeons who have occasion to investigate shoulder lesions that the cuff tissues are thickened, show increased vascularity, and no obvious demarcation of the tendons making up the cuff. No adhesions are noted between the walls of the subacromial bursa. Microscopic examination of the sections of the capsule reveal chronic inflammation with associated fibrosis and perivascular round-cell infiltration. Slides of the supraspinatus tendon reveal focal necrosis with increased vascularity from the periphery inward. Associated with degeneration is the deposition of amorphous calcium (calcium phosphate and calcium carbonate). This may occur in tendons, ligaments, aponeurosis, and capsular attachments as well as in the walls of the blood vessel.

In the region of the shoulder joint the deposition is in the tendinous part of the rotator cuff and usually near the insertion of the supraspinatus at the greater tuberosity of the humerus.

The most common degenerative lesion in the shoulder is a calcific deposit in the rotator cuff. The clinical picture in the acute phase is dominated by severe pain. The pain may be localized to the shoulder joint or it may be referred to the insertion of the deltoid or to the elbow and on rare occasions to the wrist. It usually increases in severity for the first 4 or 5 days and then may gradually diminish. The pain is of such intensity that sleep is impossible and relief is only obtained with adequate opiate sedation. Accompanying the pain is limitation of arm motion, specifically in the arcs of abduction and external rotation.

The clinical picture is a reflector of pathologic process. In the acute phase surgical intervention may reveal the calcification to have a consistency similar to that of toothpaste. In cases in which the bursa is secondarily inflamed the deposit is milky and the bursa is under great tension. The floor of the bursa and the superior surface of the cuff are so intimately related that any disease of the tendon structure inevitably involves the bursa to produce a condition of bursitis. As Withers[2] so aptly stated, "The subdeltoid bursa is the peritoneum of the spinati tendons; like the peritoneum lt shares the pathology of the organs it protects and is itself seldom the site of pathologic processes."

In addition to the radiologic evidence of a calcific deposit in the region of the cuff, degenerative shoulder lesions reveal further X-ray evidence of their presence. Irregularity of the cortical bone of the greater tuberosity frequently associated with cystic cavitation and sclerosis in and about the greater tuberosity of the humerus are usual X-ray findings.[3] Articular surface erosion of the head of the humerus and loss of the normal outline of the anatomic neck are further infrequent radiologic findings indicative of a degenerative lesion.

In resolving this lesion nature pursues one of two different methods. The usual is to absorb the fluid and reduce the tension in the subdeltoid bursa. At this point the patient experiences symtomatic improvement. The calcium in the tendinous part of the cuff is resorbed, partially or completely. The resolution is facilitated by inducing revascularization, i.e., needling of the area. The second and less frequent course of events is rupture of the material in the tendon into the bursa or along fascial planes.[4] Acute pain is relieved rapidly; however, in some cases a severe inflammatory reaction may be initiated. This inflammatory response with or without the calcific deposit may lead to a chronically stiff and painful shoulder.

In some instances the calcified deposits may become dry, firm and gritty, causing a dull aching shoulder with loss of normal scapulohumeral rhythm on motion. Pain results from mechanical rather than inflammatory irritation of the bursal synovial lining. A degenerated tendon with calcification in the rotator cuff rubs constantly between the humerus and the acromion or coraco-acromial ligament. As a result of this mechanical irritation the bursal walls become thickened with further pinching of this sac on abduction of the arm. Such cases of chronic calcified tendonitis usually require surgery for their ultimate relief.

Another common degenerative disease entity of the shoulder is adhesive capsulitis[5] or a so-called frozen shoulder. It is the most common shoulder condition in the middle-aged. Although this entity may follow a calcific deposit in the musculotendinous cuff, the sequence of events in the development of this common shoulder disability is not always so clearcut. At present the only factor underlying all frozen shoulders is disuse or inactivity of this joint. Such inactivity may be a result of acute or chronic bursitis, trauma, biceps tendonitis, prolonged use of a forearm sling, or operative procedures in or about the shoulder with prolonged immobilization.

(*Continued on page 238*)

BALL-THROWING FRACTURE OF THE HUMERUS

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FRACTURES of normal bone resulting from violent muscular contractures are relatively uncommon. When shock therapy was first introduced, reports of fractures from convulsions were quite numerous, but fractures of the humerus from throwing a baseball must be very infrequent, considering how few cases are reported in the literature.[1] Some of the standard textbooks on fractures mention muscular violence as one of the causes of fractures of the shaft of the humerus, but no actual cases are described.[2, 3]

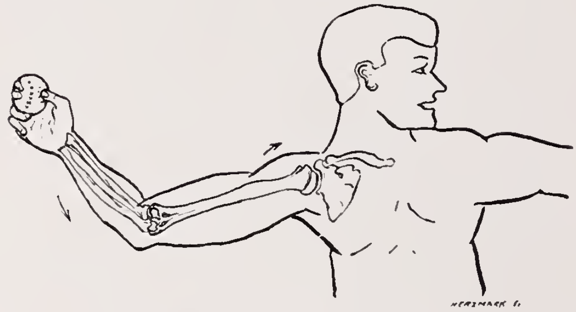

Fig. 1. Position of arm in throwing a ball.

Four cases of fracture of the shaft of the right humerus were recently observed in muscular young men which resulted from the throwing of a baseball with considerable force. These men were all confined at the Lorton Reformatory, and the ball-throwing was part of regular recreational activity. In each instance the fracture occurred during the act of throwing, was given immediate care, and healed with good functional recovery without undue delay.

The mechanism of the production of this type of fracture is of interest and may be explained on the basis of a powerful torsion of the shaft of the humerus caused by the muscles of the upper arm and shoulder holding the head in external rotation while the flexors attached to the lower end of the shaft aided by the leverage of the bent forearm twist the lower end in internal rotation. To understand why the fracture is spiral oblique, a review of the anatomy of the humerus is informative.

The humerus is a long, relatively slender bone, roughly cylindrical, with a groove which runs from within outward, downward and forward. The upper portion of the bone has relatively little muscle attachment, while the lower part is almost completely surrounded with muscle tissue. The insertion of the deltoid muscle at the outer aspect of the shaft just above the middle, together with the supra- and infraspinatus muscles which insert about the greater tuberosity tend to abduct and externally rotate the arm, while the coracobrachialis muscle attaching to a goodly portion of the mesial aspect of the shaft aids in flexion and internal rotation. In addition, the powerful biceps and the brachialis anticus

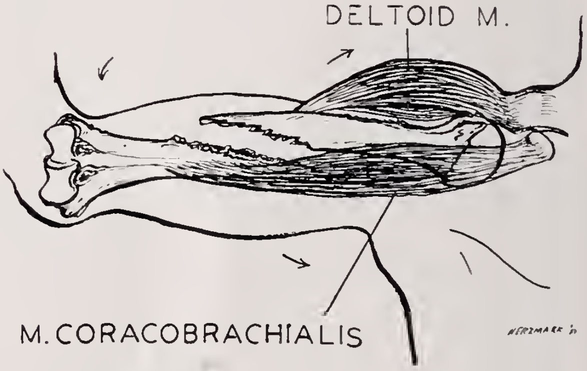

Fig. 2. The line of cleavage through the neural groove The lower end of the humerus is rotated inward, the upper portion outward.

muscles act to adduct, flex and roll the lower end of the arm inward.

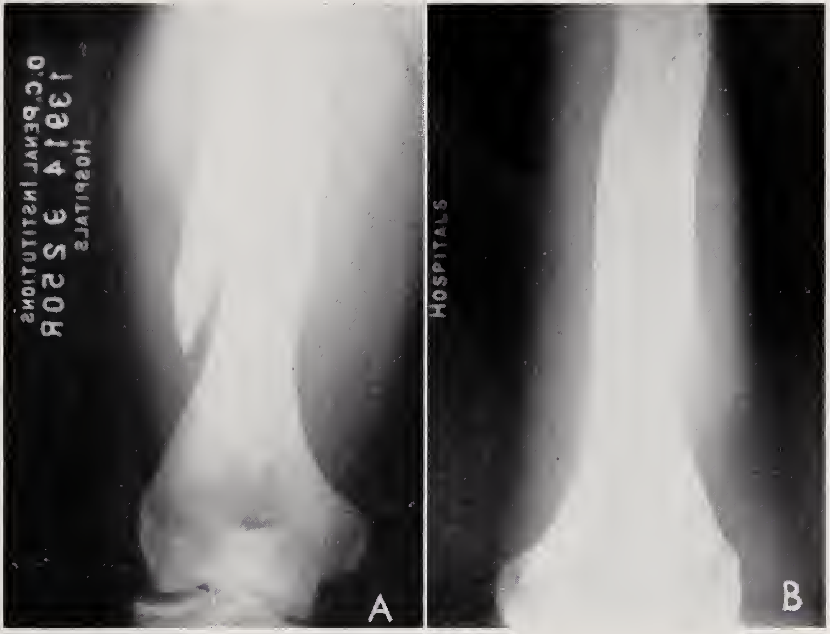

Fig. 3. Case 1. (A) Spiral oblique fracture through the shaft of the right humerus after throwing a baseball. (B) Union after 5 weeks.

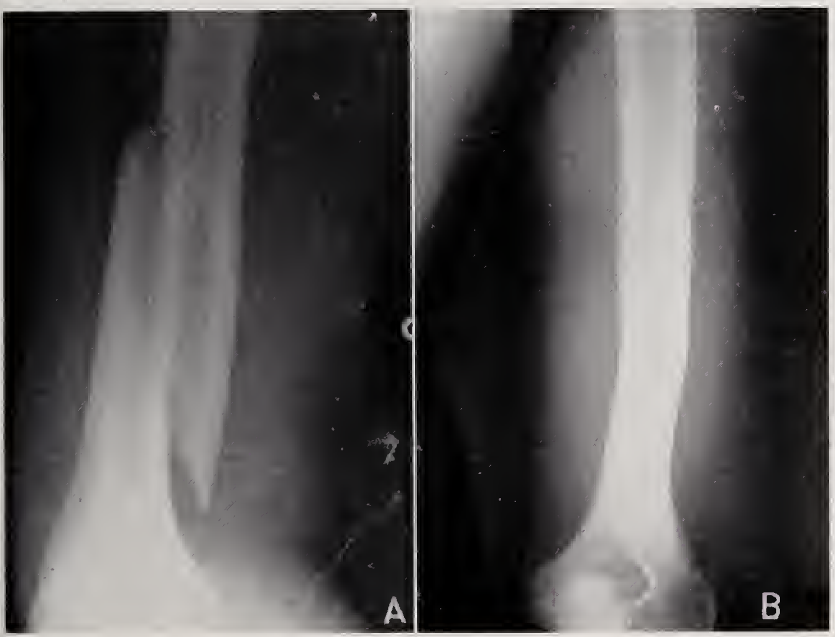

Fig. 4. Case 2. (A) Spiral oblique fracture, right humerus. (B) Union after 5 weeks.

In the action of throwing a ball the arm is raised, extended and externally rotated, the elbow is almost completely extended, and the hand holding the ball is thrown back as far as possible (fig. 1). When the limit of this action is reached, the arm is then forcefully and rapidly flexed, partially adducted and internally rotated while the elbow is flexed, the forearm partially pronated, the wrist flexed; and when the maximum range has been reached, the ball is released with the index and third fingers guiding in the diection of the target. The powerfully developed but inexperienced ball-thrower, in his desire to get maximum power in his throw, extends the arm too far back, flexes the elbow too quickly and snaps the action short. Thus, in some instances the adductors and external rotators do not have time to relax before the rapidly contracting flexors and internal rotators, aided by the leverage of the flexed forearm traveling through the arc of internal rotation of the lower end of the shaft against the upper end held in external rotation, twist the lower portion of the shaft and cause a spiral oblique fracture through the neural groove (fig. 2).

REPORT OF CASES

Case 1. C. F., No. 85242, a colored man 28 years old, with a weight of 178 lbs. and a height of 75½ inches, was in excellent physical condition and very muscular.

The blood serologic examination was negative, the P.M.H. was negative, and there had been no previous fractures or illnesses. The usual occupation was cook-baker. He was confined to a cell from June 5, 1950 to September 1, 1950. For exercise he did daily push-ups, increasing the number until he could do 200 at a time. After release he began to play with a soft-ball. After throwing 25 to 30 pitches, he increased the power of the throw. After reaching the maximum of extension, with the elbow flexed, he began to move the arm forward to throw as hard as possible. Half-way through the motion, he felt his arm snap and lost control. He was removed to the dispensary, where a fracture, spiral oblique of the humerus, was found (fig. 3-A). After reduction the arm was immobilized in a plaster hanging cast and excellent functional result was obtained (fig. 3-B).

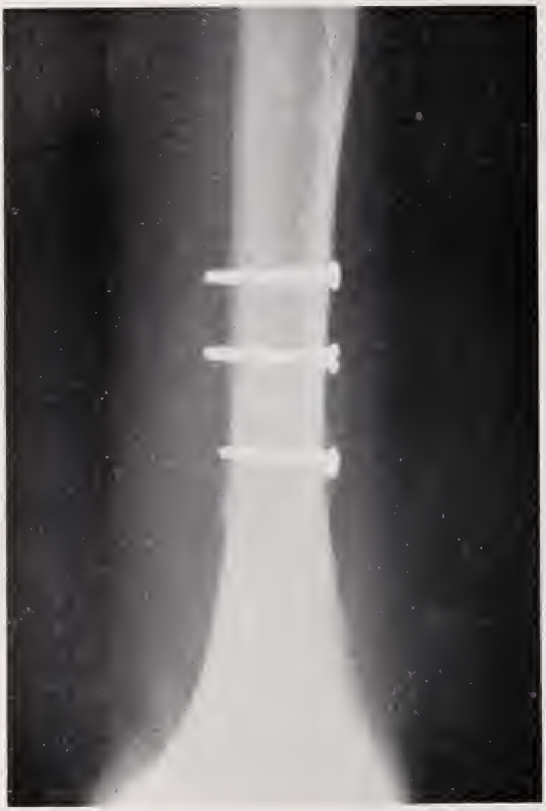

FIG. 5. Case 3. Spiral oblique fracture of right humerus immobilized with screws.

Case 2. H. H., No. 23262, a white man aged 28, was a silver fox farmer. His height was $65\frac{3}{4}$ inches and his weight was $147\frac{1}{4}$ lbs. He was in good health. The blood Kahn test was 4-plus. He was given antiluetic treatment in alternating courses, consisting of mepharsan and bismuth intravenously. Several months after completing the treatment he entered into a contest to see who could throw a baseball the greatest distance. While making the pitch he felt his right arm crack and lost control. He was taken to the dispensary where an X-ray film showed an oblique fracture of the right humerus (fig. 4-A). A Jones humerus splint was applied, and after 5 weeks the bone was solidly healed with good function of the arm (fig. 4-B).

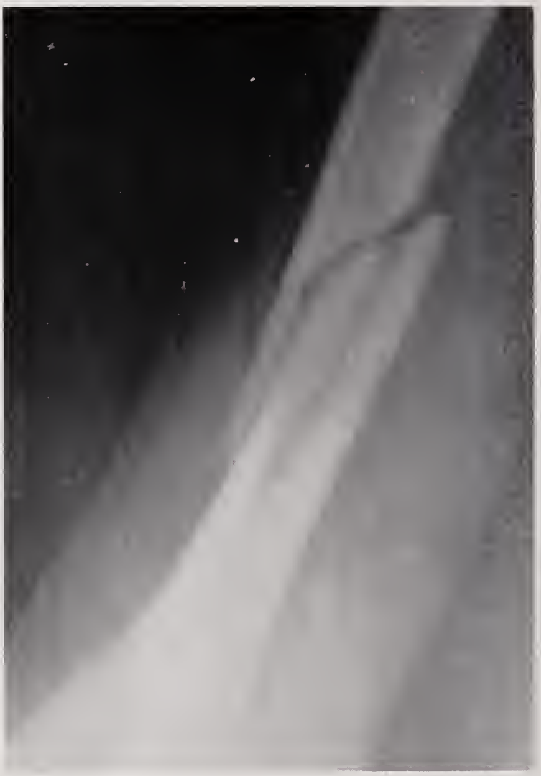

FIG. 6. Case 4. Spiral oblique fracture of humerus.

Case 3. S. W., No. 72517, a colored man aged 23, whose height was 73 inches and whose weight was 153 lbs., was a mimeograph operator. He was in excellent physical condition. The blood serology test was negative. While throwing a baseball he felt his arm snap. X-ray films showed a spiral fracture. Manipulation failed to approximate the fragments properly, and an open reduction was carried out. Muscle tissue was found interposed. The approximated ends were fixed with Collison screws and the arm immobilized in plaster (fig. 5). Good union resulted.

Case 4. A. T. C., a white man whose height was 68¼ in. and whose weight was 149 lbs., was in good health. He was treated for syphilis until the serologic test was negative. A few months after completion of the treatment he was on the recreation field trying to throw a baseball into the air as high as possible. He felt his arm crack. X-ray films showed a spiral fracture through the right humerus (fig. 6). A Jones splint was applied after reduction, and a good result was obtained.

SUMMARY

Four cases of spontaneous fracture of the right humerus resulting from the throwing of a ball are described, with a discussion of the mechanism of fracture. A description of the type of throw which involves the humerus in a powerful torsion is shown to lead to a spiral oblique fracture through the neural groove.

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3. Key, J. A., and Conwell, H. E.: The Management of Fractures and Sprains. St. Louis: Mosby, 1942.

ART SECTION OF THE ARMY MEDICAL LIBRARY

What formerly was known as "The Picture Collection" of the Library has become a full-fledged Art Section due to its growth in size, organization, and use. The Section, located in Tampa Hall, across Independence Avenue from the main Library, has much better equipment and space than it had in its former quarters in the Annex.

In 1948 there were approximately 15,000 items in the collection; now there are well over 21,000 pictures and nearly 13,000 negatives. Acquisitions during the past year included numerous gifts, such as the fine collection of medical bookplates from Dr. Morris Fishbein and a large collection from Dr. Webb E. Haymaker of portraits of neurologists attending the 1949 International Neurological Congress in Paris. The continuing program of exchange with the Armed Forces Institute of Pathology brought in many pictures of medical institutions, and the Library received a collection of portraits from the duplicates in the New York Academy of Medicine. In addition to these large gifts, pictures are acquired through letters of solicitation. In recent months nearly 800 pictures of military and civilian hospitals and over 500 portraits of Fellows of the American College of Physicians and of Initiates of the American College of Surgeons have been acquired through this means. The Art Section's collection of portraits of Honorary Consultants to the Army Medical Library was also thus substantially augmented in 1951, though it is not as yet complete.

The staff of the Armed Forces Institute of Pathology makes frequent use of the picture material, as do writers, editors, and publishing companies. The greatest number of calls are for portraits of physicians of the past and present and of military medical officers and nurses. Next in frequency are requests for historical material, for hospital pictures, especially hospitals in Civil War times, and for medical subjects. The steady increase in service to the public seems proof of the value of the Art Section.

The Library is always grateful to receive additional pictorial material of medical interest. Gift pictures, or information on pictures available for purchase, should be addressed to the Catalog Division, Army Medical Library, Seventh Street and Independence Avenue, S.W., Washington 25, D. C.

—*Army Medical Library News, February 1952*

REHABILITATION OF THE UPPER EXTREMITY FOLLOWING POLIOMYELITIS

Report of a Case

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EXTENSIVE paralysis of an upper extremity is a not infrequent sequel of a severe attack of anterior poliomyelitis. Paralysis of the shoulder muscles, weakness and inability to control the forearm, elbow and wrist, and absent apposition of the thumb are serious problems which cannot be overcome by present methods of bracing to produce a functional extremity. Fortunately, we do have available numerous operative procedures, involving muscle transplants, osseous surgery, use of fascia, etc., which may add a good deal of function to a severely disabled extremity. However, each case is an individual problem which requires most careful planning and meticulous attention to every detail to achieve a maximum result. Not only must the surgery be well executed and casts applied with preciseness, but full coöperation must be secured from the physical therapist, the parents, and the patient. They form a most important cog in the postoperative phase of every rehabilitation program. The success of many surgical procedures, and especially tendon transplants, is strongly dependent upon the postoperative care, including proper protective bracing, well supervised physical therapy, and supervised home activities.

The selection of the proper time for the various rehabilitation procedures is essential to their eventual success. Although tendon surgery can generally be performed at an earlier age than osseous surgery, it must be deferred until the child can coöperate fully in the postoperative exercises which are so important to the transplanted muscle. Fusion operations must await sufficient bony development, usually not before 8 years of age. In the case herein reported the first attack of poliomyelitis occurred at the age of 3. It was necessary to defer operative treatment until the age of 9, making use of various types of shoulder and thumb opponens braces to minimize deformity, and physical therapy to prevent complicating contractures, until he was able to coöperate fully and to undergo the required osseous surgery.

REPORT OF CASE

F. M., a white boy, was admitted to Children's Hospital, September 3, 1944 for observation for acute poliomyelitis, but was discharged 24 hours later with all studies negative. He had been admitted earlier the same year for a few days for Ludwig's angina but otherwise had previously incurred no unusual illnesses. On August 3, 1945 he was again admitted for observation for poliomyelitis with characteristic clinical and laboratory signs, including paralysis of the legs, stiffness of the neck, and a severe paralysis of the entire right upper extremity. A diagnosis of poliomyelitis was quickly established and treatment begun with moist, warm packs to regions of muscle spasm and tenderness, support for the paralyzed right upper extremity, and therapeutic muscle reëducation. He was discharged September 8, 1945, examination then revealing complete paralysis of the right deltoid and external rotator muscles, severe atrophy of the right shoulder and upper arm, poor flexors and extensors of the right shoulder, and faint traces of opponens function in the right thumb. A few weeks later a complete muscle check performed in the physical therapy clinic revealed no residual paralyses in the legs, neck or back but the following findings in the right upper extremity (scale 0–100):

Thumb: Opponens—faint trace
Adduction—good
Wrist: Extensors—excellent
Flexors—good

Elbow: Supinator—70
Pronator—60
Flexors—poor
Extensors—fair
Shoulder: External rotators—30
Internal rotators—30
Abductor—0
Adductor—20
Flexors—20
Extensors—20
Pectoralis minor—0
Subscapularis—60

He was followed in the outpatient clinic with frequent physical therapy of the right upper extremity, which was supported with a shoulder harness and a small opponens brace for the thumb. Examination 2 years after the onset of his illness, September 1947, revealed zero function in the supraspinatus, deltoid and biceps muscles, traces of teres major and minor muscles, a poor triceps, good trapezius, and zero function in the opponens of the thumb. At this time it was recommended that a shoulder fusion be performed at the approximate age of 8 years, after sufficient bony development.

On June 16, 1949 marked relaxation of the shoulder joint capsule with evident subluxation was first observed and noted, as well as lack of return of any function in the thumb opponens. At this time, after presentation of the case to the monthly poliomyelitis conference, a full program of surgical treatment to rehabilitate the useless extremity was outlined. This consisted of fusion of the shoulder joint in 90° abduction and 30° forward flexion, flexor muscle transplant at the elbow, and opponens transplant for the thumb.

All of the surgical procedures were completed at Children's Hospital. The first, arthrodesis of the right shoulder, was performed, September 19, 1949. Marked relaxation of the joint capsule with little or no residual deltoid muscle tissue was noted. Fusion was secured by denuding the humeral head and glenoid fossa of all articular cartilage, and then bending an osteotomized acromion process downward to fit into a wedge-shaped notch cut into the greater tuberosity held by retaining chromic catgut sutures. A position of 90° abduction and 30° forward flexion of the arm was maintained by transfixing the joint with a short Steinman pin inserted below the operative incision, followed by the application of a shoulder spica cast. The pin was removed through a window cut in the cast 8 weeks later, and the entire cast removed, January 5, 1950. Clinical and X-ray examination revealed firm bony fusion; light exercises to develop the trapezius muscle were then begun.

Two weeks later he was able to abduct the right shoulder girdle to 45° without pain and could easily bring the arm down to his side. Physical therapy was increased, and within 2 months he could abduct the right shoulder to 65°, using scapular rotation. He was then ready for his next surgical procedure, to be done during Easter vacation recess.

On April 5, 1950 a Steindler flexorplasty procedure[1] was performed on the right elbow, with transplantation of the common flexor tendon of origin 2 inches proximally onto the humerus, a drill hole and small wire suture being used to secure good anchorage, with the elbow held in 80° flexion, mid-supination and pronation by a long arm cast. The ulnar nerve was also transferred anteriorly to avoid compression from the displaced flexor tendon. After removal of the cast 4 weeks later intensive physical therapy was instituted to develop the flexor muscles (rated good preoperatively) and to extend the elbow. Maximum extension obtainable was to 135°, which was believed to be optimum if sufficient power to flex the elbow was to be retained. However, it soon became apparent that there was a marked pronator supremacy over his weakened supinators, displayed when the newly acquired ability to flex the elbow was used to bring his hand to the mouth.

The excellent progress made was reported to the Poliomyelitis Conference June 21, 1950, and it was the consensus that the elbow and shoulder operations had resulted in marked improvement. It was recommended that rehabilitation be continued with surgery to correct the pronator supremacy of the forearm and opponens weakness of the thumb. Accordingly, on August 9, 1950 an opponens transplant was performed by the method of Steindler,[1] in which the tendon of the flexor pollicis longus is split longitudinally and the lateral half made to encircle the proximal phalanx of the thumb. At the same time the pronator teres was partially released to diminish the pronator supremacy in the right forearm. The cast was removed 1 month later and active physical therapy once more instituted. Within a month there was excellent opponens action in the thumb, but the pronator teres was still overactive for the weak supinators. Three months after the opponens operation a clinical examination revealed active shoulder abduction from 0 to 75°, elbow flexion to 60°, extension to 135°, full opponens power, and 20° flexion in the interphalangeal joint of the thumb.

The final operation in the rehabilitation of this weakened upper extremity was a supinator transplant, done December 19, 1950 at the beginning of the holiday recess. The tendon of the flexor carpi ulnaris was freed and transplanted obliquely across the dorsum of the forearm to the dorsal aspect of the radius at the wrist (Steindler[1]). When the plaster was removed a month later, immediate supination was observed. A leather night splint was fashioned to preserve this newly gained

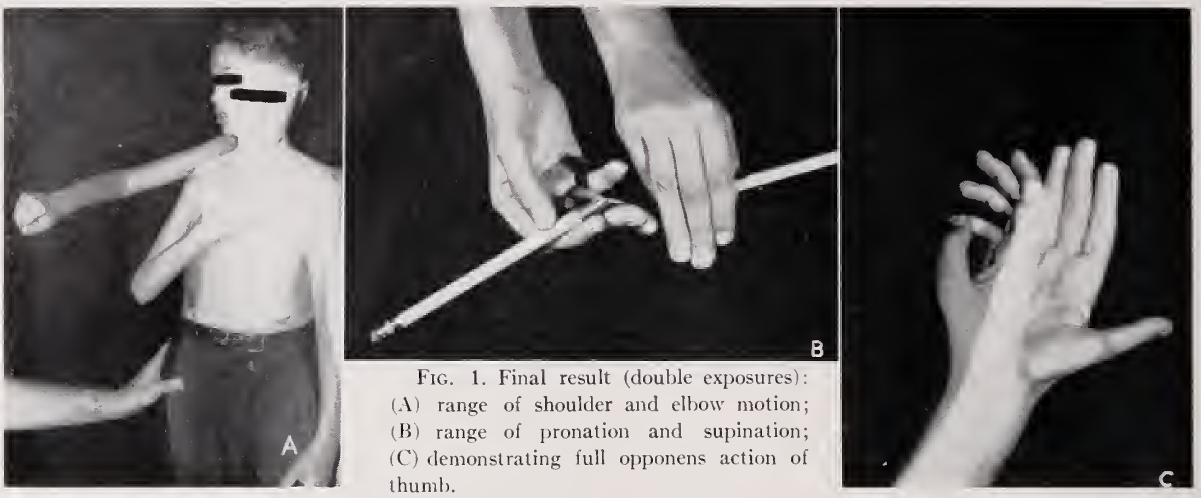

Fig. 1. Final result (double exposures): (A) range of shoulder and elbow motion; (B) range of pronation and supination; (C) demonstrating full opponens action of thumb.

supination and to protect it while active and passive exercises were improving the strength of the transplant. On February 8, 1951 examination revealed excellent function in the supinator transplant and he was now able to bring objects to his mouth without difficulty and without the hand suddenly "flopping over" from unopposed pronator action. Flexion of the interphalangeal joint of the thumb also increased to 35°. The following month he made the first team while playing basketball at school, and it was only later that the coach noticed that his unorthodox style was due to a physical handicap.

On examination in August, 1951 there was 80° shoulder abduction, elbow motion from 60 to 135°, fair supination, and fair-plus pronation of the forearm, 30° flexion of the interphalangeal joint of thumb, excellent opponens of the thumb, and good flexors and extensors of the fingers and wrist (fig. 1). He was able to perform all of his daily necessities without aid (see fig. 2), attend school regularly, and participate in regular school activities and sports.

Comment

This case has been presented to illustrate what can be done to rehabilitate an apparently hopelessly damaged upper extremity as a residual of anterior poliomyelitis. A properly planned program which includes physical therapy combined with well selected surgical procedures, unhurried and interspersed with sufficient recuperative intervals, can convert a useless extremity into a functional unit which may remove the individual from the handicapped group and permit normal activities and occupation. In the case reported the right upper extremity was sufficiently improved by the multiple surgical procedures to permit active function and occupational use. Further progress is to be expected with continued use of the rehabilitated extremity. The stimulated mental outlook is another important result not to be overlooked.

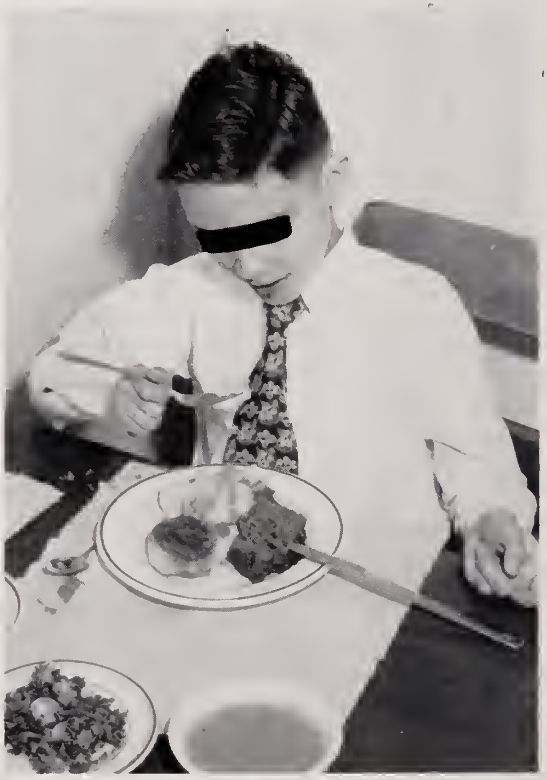

Fig. 2. A useful extremity.

(*Continued on page 238*)

President's Page

SOCIETY AND THE PHYSICIAN

X. The Physician and His Fun

Maybe last month's "page" was a little preachy, somewhat serious and weighty, but worthy of thought, nonetheless. This time, however, spring has come. A benign and considerate deity, realizing that we have taken all the bad weather, flu, and daily pressure we could stand, has provided some let-up and I hope a chance for relaxation.

The golf clubs are out, and I hope to bring my score down from 115 to 105 (same hope I've had for the last several years). The garden is full of color from bulbs, and flowering shrubs. I suspect that soon they will need separating and pruning. The grass is also growing again, I'm afraid. I'm not sure whether the lawn mower or putter will win out each Thursday afternoon and week ends.

Fish are running in the river. The Skyline Drive is fresh green. Williamsburg, Fredericksburg, Charlottesville, and Georgetown are showing their homes and gardens. Summer plans are beginning to shape up—the mountains, the shore, Canada. Then the fall with brisk tingle, rainbow foliage, squirrel-, bird-, and later deer-hunting. Then winter again.

This flow of words, brought on by spring, probably needs a good dose of sulfur and molasses. Actually, it's an appreciation for hopes of relaxation and recreation. I'm sure no profession, as a whole, pushes harder, works longer hours, sees more troubles than does the medical profession. Nor in any other profession is the "coronary harvest" so large and so early.

A periodic or occasional surcease in the form of sports, hobbies, and travel is of paramount importance to the busy doctor. So next year, I'm going to play golf three times a week. I'm going to take piano lessons; and learn to sing instead of just whistle. I shall take that trip to New Orleans, Hawaii, Banff (or Hyattsville). I shall work less and play more . . . I keep telling myself, as I have for the past several years. You can't blame me for dreaming.

Editorials

CARDIAC ARREST

There is today more interest than ever before in the causes and treatment of cardiac arrest during surgery. From many of the articles now constantly appearing it would seem that this is an increasing cause of catastrophe. However, it was recognized and competently evaluated near the beginning of the century.[1,2]

In the broadest sense, of course, any patient who dies does so in cardiac arrest. The inclusion of anesthetic overdosage, anoxia from any cause, air embolism, coronary occlusion, etc. among the causes of clinical cardiac arrest is justified on physiologic grounds.[3]

More specific and limited consideration of cases in which almost instantly the heart actually loses its pumping capacity revolves around response to some such drugs as epinephrine (even if manufactured in the patient), chloroform, ethyl chloride, cyclopropane, etc., and to reflex response to some surgical or anesthetic manipulations.

Since early reports of cases treated by cardiac massage beginning more than a half century ago, most writers have stressed that immediate diagnosis is the key to successful treatment.[4,5]

Less stressed, but perhaps even more important, is the fact that the careful observation necessary for such early diagnosis should make it possible in most cases to recognize impending rather than actual collapse.

It may be true that in an average general surgical service as many as 1 patient in a thousand may die under anesthesia, and in this broad sense from cardiac arrest. It is also true, however, that in some especially good series the incidence for many thousands of patients is only a tenth as great,[6] while in some authentic series the incidence may be 5 or 6 times as great.

This extreme variability on anesthesia services argues forcefully that management is the major factor. Such argument does not detract from the force of the contention that whatever the cause of cardiac arrest it must be followed by immediate diagnosis and effective artificial respiration plus artificial circulation, all within a critical period of about 3 minutes if the best chance of survival is to be given the patient.

In our teaching we are faced with the dilemma of whether to stress that good management will prevent most cases of cardiac arrest and elaborate on this viewpoint, or to teach that the major objective in planning is to prepare as many as possible to assume at need the duties of cardiac massage.

Continued effective heart function is primarily dependent upon maintenance of an adequate oxygen reserve. This means in turn that coronary pressures must exceed 40 mm. Hg and all normal channels remain patent for effective blood perfusion of the muscle.[7] It means also that the

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[1] Green: Lancet, 1906, **2**, 1708.

[2] White, C. S.: Surg., Gynec. & Obst., 1909, **9**, 388.

[3] Bonica, J.: Current Researches in Anesth. & Analg., 1952, **31**, 1.

[4] Beck, C. S., and Rand, H. J.: J.A.M.A., 1949, **141**, 1230.

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[7] Crile, G. W.: Anemia and Resuscitation. New York: Appleton, 1914.

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

perfused blood must have been previously oxygenated in the lungs, necessitating prior pulmonary ventilation.

A clear understanding of the underlying physiology will enable each surgeon or anesthesiologist to decide for himself how to balance his study of careful management versus resuscitative technics. It will perhaps lead again to the old saying that "An ounce of prevention is worth a pound of cure."

C. S. W.
D. S.

BARBITURATES AND THE PHYSICIAN

With considerable frequency the daily papers carry stories of suicides committed by means of "sleeping tablets"—almost always barbiturates. This is one of the ways in which the abuse of this group of drugs is brought dramatically to public attention, and it is not strange that occasional demands are heard that the barbiturates be brought under the provisions of the Harrison Act or that their use be otherwise controlled Federally.

The extent to which these drugs are improperly used cannot be well assessed. It is estimated on good authority that no less than three billion doses are sold yearly in this country! Even with all of the cases in which these sedatives are prescribed for convulsive disorders and for occasional insomnia, it takes no vivid imagination to consider an average of 20 doses per man, woman and child as far in excess of medical needs.

Whether the barbiturates are truly addictive in the sense of bringing about such physiologic changes that deprivation causes physical symptoms is perhaps a question of semantics. Certain it is that there are many unstable persons who easily become habituated, and who develop a pathologic dependence on sedative drugs, such as the barbiturates and alcohol, or worse still, a combination of those two. Although many of the neurologic symptoms of barbiturate intoxication, such as tremors and incoördination, tend to be transitory, permanent psychic damage may develop in the habitué, and accidental death from overdosage is all too common.

Most states now require pharmacists to dispense the barbiturate drugs only on a physician's prescription. To apply the Harrison Act to these drugs would make their legitimate use extremely difficult, and it probably is not desirable, at least until other methods of control have been tried and have failed.

The most important factor in the chain of control is the physician himself, and next to him the pharmacist. The physician should be alert to the dangers of barbiturate habituation, and especially to the tricks employed by the habitué. He should be careful to prescribe only enough for the particular use and try to avoid giving the patient the opportunity to accumulate a large number of tablets or capsules. It is doubtful whether it is desirable to permit refills; indeed it would be much preferable to mark each prescription "not to be refilled." The pharmacist should sell only on a written prescription, and, if a prescription is presented for refilling, he should ascertain from the physician that there is no objection.

The present state of thinking on the part of Federal officials appears to be that the control of traffic in barbiturates is a proper state function, and that by appropriate state legislation, plus the coöperation of physicians, pharmacists, and the pharmaceutics manufacturers, the use of these drugs, most useful in their place, can be limited to proper medical use. If, later on, the demand for Federal restriction is renewed, the medical and pharmaceutic professions may perhaps look to their own actions if they would seek to fix the blame.

W. O.

HOW SHOULD WE TREAT ADOLESCENCE?

Song and story attribute advantages to youth which it does not deserve. Youth is said to be carefree and to be the happiest time of life. Nostalgic reference is made to the "good old days," when in reality most of us, of whatever age, are enjoying the "good old days" right now. At the present time we are taking the bitter with the sweet in about equal proportions, but the bitter seems to be more frequent because it impresses us more. The sweet is not so much appreciated until time, plus imagination, allows us to view the past with rose-colored spectacles. The sharp outline of events which have happened is softened, and the tendency we all have to eliminate the unpleasant occurrences of life from our minds causes the bitter experiences to be forgotten.

I deny that youth is an unalloyed, pleasant experience, and I think that adolescence is the most trying period of life.

Do you remember the years you lived between, let us say, 13 and 20? You have arrived at puberty and have left childhood behind. Sexual awakening has occurred, and you do not understand it. You are confused and possibly afraid. You worry because you feel that you are different from others. You keep your thoughts and feelings to yourself because you hesitate to confide in others. You are neither fish nor flesh. Your voice has become deeper, and probably you find it necessary to remove, from time to time, the down which recurs on your face. Yet you are not a man. You want to act like a man but you are not treated like one. People misunderstand you. You have not yet acquired the knowledge and experience upon which to base judgment. Therefore, you make many errors in judgment. You are aware of this and attempt to compensate by aggressiveness and a "know-it-all" attitude.

Your father attempts to make you his pal. You fish and golf with him. You realize that it is impossible to be his pal. Your ideas do not jibe, and there always comes the time when he must exert his authority. This spoils the relationship. As a child he was your idol. You see him now with his friends. You compare him to them and conclude that he is just about average. Maybe you are disillusioned when you hear him relate a risqué story, or when he lingers too long at the 19th hole. You no longer attempt to imitate him, and you substitute your own ideas and judgments for his. Too frequently these are found to be wrong. You long to be understood by others and even by yourself.

You are awkward with girls. You say the wrong thing. You would like to be popular, but sooner or later your judgment errs again and you are held up to ridicule. Your allowance somehow does not last long enough. You are broke most of the time and you are embarrassed in the company of boys whose fathers' wealth allows them to spend more money and to drive their own car.

At home you are directed to do this and are forbidden to do that, without explanation of the *why's* and *wherefore's*. Nobody asks your advice. You are reprimanded for acts which appeared to you to be correct, and praise is lacking when you have done the right thing.

As you approach 20 things begin to clear up. You are consulted on matters. Knowledge and experience are catching up, and your judgment improves. You are likely to entertain the sentiments of the 21-year-old who was overheard saying to his companions that his father was a remarkable man and that he learned more in the past year than anyone ever heard of.

Adolescence is an age of sensitiveness, misunderstanding, apprehension and fear. The affairs of life are very serious at that age, and what later would be mere disappointments are tragedies. Repeated rebuffs and criticism cause heartburnings and make introspective, anti-social characters who later may become Communists or law-breakers.

Adults therefore should study adolescents and, remembering their own experience, treat them with deference and try to understand their problems. Correction should be accompanied with free explanation. Tact and consideration should be exercised, and the adolescent should take part in family conferences and be listened to with respectful attention. The relationship of father and son should be one of mutual respect, with the maintenance of dignity by the parent and proper regard for authority by the son. Treat the adolescent as an adult and expect him to respond by attempting to live up to your apparent estimate of him. You will not be disappointed. Encourage confidences and be ready with sympathetic advice, which will include the difference between right and wrong. Instil the fact that honesty is the best policy, and that deception and corner-cutting can usually lead to the loss of regard of other people, and to the unhappiness of the person who practices it.

Proper treatment of the adolescent will result in making him a good citizen. You can make his adolescence happy.

James A. Gannon, M.D.

In and Out of Focus

BY THE OBSERVER

It's a Rugged Life

In his reflections on the state of society, your Observer has often thought how much easier life is for extroverts, and how few of them he knows, especially among those with whom he is closely associated in the Medical Society. As a matter of fact, most of his associates are thoughtful, conscientious physicians heavily burdened with their many responsibilities. It is not in their natures to take these lightly, and being of a serious turn of mind himself, your Observer is grateful that this is so.

There would be some hesitation on your Observer's part in proceeding further with these comments were it not for the fact that one of the ablest and most serious-minded officers the Society has had, will soon relinquish most of his official duties. He will not, as most former Presidents, become a member of the Executive Board. While your Observer does not pretend to have a complete knowledge of Dr. Frank D. Costenbader's activities he can testify to the fact that no "chief executive" of our Society, in his recollection, has been so burdened with official duties as he has, and, furthermore, none has dealt with them more adequately.

No member needs to be told that serious problems have confronted the Society since Dr. Costenbader took over. Inescapably he has, therefore, participated in innumerable meetings, devoted a tremendous amount of time to discussion of more acute problems, attended a great variety of conferences, and taken an active part in a number of ambitious undertakings such as the Annual Scientific Assembly, the Midwinter Seminar, and the Conference on Medical Teaching Technics. As if this were not enough, Dr. Costenbader has also been an important factor in the operation of the Society's prepayment plan, Medical Service. He was President of the Board of Trustees of the Service until he became head of the Medical Society on July 1, 1951. Since then he has been a member of the Service's Board. While he is giving up most of his Society activities, he proposes to see the Service through its growing pains, and then he hopes to have some time for his personal affairs.

Your Observer does not want to give the impression that Dr. Costenbader has considered all his duties as the Medical Society's President unpleasant. In fact, like all Presidents, he has enjoyed many fine relationships which would never have existed were it not for the position to which he was elected. And then there is the honor of having been chosen President by his fellow physicians, which is something always to be cherished.

Perhaps your Observer should now state the point of these observations, which is simply to lift the veil a little so that our membership will have some appreciation of what being President of our Society means to a conscientious, hard-working doctor. It is not all honor and glory by any means. It is a rugged life.

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A Career of Service

As every oldster knows, time accelerates its tempo with advancing years. Before one is aware of it, one's contemporaries are snuffed out, and one begins to speculate who will be next to go. While these are not particularly happy thoughts, they must have been uppermost in the minds of many when the death of Dr. Coursen Baxter Conklin became known. Dr. Conklin is the last of several prominent physicians who have laid down their burdens in the past year.

Because of circumstances over which he had no control, your Observer did not become acquainted with the real Dr. Conklin until some years after succeeding him as Secretary of the District Medical Society. The occasion finally presented itself on a journey to Chicago where Dr. Conklin represented our Society as delegate to the American Medical Association. Any lack of understanding which had previously existed was wiped away in a heart-to-heart talk.

It was at that time your Observer discovered the real worth of his predecessor. He learned that here was a kindly, sincere and humble man. There was no pretense about him; in fact, Dr. Conklin was inclined to be too modest about himself, his abilities and accomplishments. He possessed virtues that many of his fellows might well have envied—patience, understanding and tolerance.

To many of the younger members of the Society, Dr. Conklin is merely a name. In reading of his death they discover for the first time that he had been Secretary of the District Medical Society for 16 years beginning in 1922. This was a period of great growth and Dr. Conklin carried on his duties with zeal and diligence despite the demands of his practice. He established the MEDICAL ANNALS, which has since become such an excellent state medical society publication. He also organized the first office staff employed by the Society.

After his retirement as Secretary in 1938, there was a five-year period of inactivity. In 1943 he became a delegate to the AMA, a post which he was to hold for six years.

As your Observer wrote on the occasion of Dr. Conklin's retirement as delegate, ". . . in good times as well as bad he never failed the medical organization with which his name is so closely associated. On the contrary, he was a devoted and able officer to whom the medical profession is deeply indebted."

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Doctor Becomes Civic Leader

"There were giants in those days!" How often we are reminded of the superior abilities and cultural attainments of the doctors of a generation or so ago. They were, we are informed, of more imposing stature in their respective communities than their modern prototypes. It was not unusual for doctors to assume the most important public offices in the community or state. Among them were statesmen, public officials and civic leaders. But the world has changed and today the doctor has little time for such things.

While much has been written on the subject of the doctors' failure to accept their public responsibilities, little has been said about those who do. Perhaps there are not as many as in former years, but there are more than is generally recognized. Recently one of our members emerged as a civic leader of no mean importance. One would never have guessed that Dr. J. Ross

Veal would be the type who could be induced to assume direction of the largest civic group in the District of Columbia. He is a quiet-spoken physician, widely recognized as top-flight in his field, vascular surgery. For several years he has been one of the Society's delegates to the Federation of Citizens' Associations. This year he was chosen President of the Federation.

When questioned in regard to accepting this office he said he believed it to be the duty of every doctor, no matter how busy he was, to perform some civic function. In times as difficult as these, he observed, the community needs are urgent. Even though he may be modestly equipped for leadership, the physician's specialized training makes his services of far more than ordinary value.

Dr. Veal is, of course, not alone in having accepted the fact that every citizen including the physician owes his community some of his time. Other doctors who come to mind are Drs. Arthur C. Christie and Roy L. Sexton, who at different times were efficient chairmen of the Board of Trade's Committee on Public Health; Dr. Herbert P. Ramsey, who served with such distinction as President of the now defunct Washington Metropolitan Health Council; Drs. Maurice A. Selinger, G. Victor Simpson and A. Magruder MacDonald, who are currently representing the Society in the District's Selective Service organization; Dr. Richard T. Sullivan, who has for so long been an able Society delegate to the Federation of Citizens' Associations; and Dr. James A. Gannon, who has performed such valuable public service as a member of the District's Board of Education. There are undoubtedly many others who belong on the above list and your Observer hopes he will be forgiven for any inadvertent omissions.

It is your Observer's sincerest hope that many will follow in the footsteps of Dr. Veal and other physicians who give generously of their time to their communities. In the meantime, let no one be too hasty in concluding that there are no "giants" in our time.

Partisan Politics and the Docter

It is a never-ending source of mystery to your Observer that doctors so frequently see news stories about themselves they don't like but overlook those which would please them.

An example of the former is the article which held the center of the front page of *The Evening Star* for February 18 describing the organization of a national committee of doctors to aid Senator Robert A. Taft in his drive for the Presidency. At least half a dozen doctors called your Observer protesting what they termed bad publicity. The AMA, whom they held responsible, they said, should have known better. Your Observer mentioned the fact that the Association had no connection with the committee, which was to be headed by Dr. Ernest E. Irons of Chicago, a former president of the AMA, but this didn't impress them much. Their resentment was genuine and your Observer sensed their feeling that the District Medical Society should make its views known concerning doctors participating as a group in partisan politics.

In contrast to the above an excellent article on MEDICAL BUREAU appeared in *The Evening Star* for February 14. So far as your Observer recalls he received but one call about this news story and that from a physician not in private practice.

Your Observer does not presume to pass judgment on the participation of doctors in partisan politics, but he is of the opinion that our Medical Society or any medical organization with like objectives should have nothing to do with efforts to advance the political candidacy of any individual. In fact, to do so, in his opinion, is to invite justifiable criticism and disunity.

Every political belief is represented in the membership of most medical societies. Beyond this, these societies are professional organizations whose avowed purposes have nothing to do with partisan politics. It seems to your Observer, therefore, that there can be only one valid reason for doctors entering the political arena and that is to support or oppose policies which have a direct bearing on the welfare of their patients.

The opposition of organized medicine to compulsory health insurance is a case in point. Doctors and their organizations would be derelict if they did not take a position on this issue.

But partisan politics is another matter. Your Observer not only lent a sympathetic ear to the recent protests but promised to mention them, which he has now done. Medical organizations would have much to lose and little to gain by this activity. The AMA is fully aware of this and, so far as your Observer is aware, has never officially given its support to any candidate.

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Seminar in Retrospect Those who were responsible for the first Midwinter Seminar held last February look back on this meeting with mixed feelings. While in most respects it more than measured up to their expectations, it was certainly not the complete success anticipated.

The greatest disappointment was the attendance. Considering the practical nature of the program and the care with which it had been prepared, the Program Committee was certain that the Medical Society auditorium would be filled to at least near capacity. But the expected turnout was never realized. The largest number present on any occasion was 125. Oftener than not there were under 100.

Among reasons advanced for the small attendance was the prevalence of respiratory illness, the large number of medical meetings, the local nature of the program, and the newness of the venture. One can take one's choice but none of these explanations is too satisfying. Perhaps there is some merit to the observation that the Seminar was a pioneer undertaking and like all new ventures will gain acceptance when its worth is fully appreciated.

The Committee was especially gratified, as it should have been, with the quality of the program, presented entirely by Washington physicians. It was superior in every respect. As President Frank D. Costenbader told your Observer and later wrote members of the Society, it was a "major league" meeting and "the papers would do justice to any national meeting which I have attended in recent years." He had much praise for Dr. Darrell C. Crain, Acting Chairman of the Committee. Members of the Committee were: Drs. Seymour Alpert, William S. Anderson, Irvin Feldman, Herbert S. Gates, William L. Howell, Paul Kiernan, David H. Kushner, Arthur A. Morris, Jr., William R. Stovall and Jacob J. Weinstein.

Due to unavoidable circumstances, Dr. Edward B. Tuohy, Chairman of the Program Committee, was inactive except to preside at one session during the Seminar.

The suggestion has been made that it might be desirable for the Society to return to its Wednesday night meetings. However, there is no evidence that attendance would be better than in the past several years. It would, therefore, seem wise to continue experimentation with the Seminar. Your Observer has a feeling that the excellent reports on the initial effort have gotten around and that next year it will be a different story.

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"Pen Pushers and Pill Peddlers . . ." "Now, to get to the theme of this evening's session. My subject is pen-pushers and pill-peddlers—blood brothers! I see many of you flinch, just as I do when one of you aims that needle and in a sugary voice says, 'This isn't going to hurt at all, old man.' Then three days later, I can move my arm again! But, seriously, gentlemen, you medics and we ink-slingers do have a lot in common."

Thus with mock seriousness did lean, dry Jim Berryman, cartoonist for the Washington *Evening Star*, address himself to members of the Medical Society and the Woman's Auxiliary on the occasion of their joint meeting in the Medical Society auditorium on February 21. Mr. Berryman hastened to explain his "blood brothers" theory as follows:

"For instance: You can't start prescribing for a pa-

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Photos by Leslie H. French, M.D.

SPEAKERS IN ACTION AT FIRST MIDWINTER SEMINAR

(1) Dr. Sol Katz, addressing the first session of the Midwinter Seminar; (2) Dr. Wallace M. Yater, Moderator for a Panel Discussion on New Drugs; (3) Dr. William L. Howell; (4) Dr. Donald Stubbs; (5) Dr. Darrell C. Crain, Acting Chairman of the Program Committee, which planned the Seminar, presiding at the opening session; (6) Dr. Jacob J. Weinstein; (7) Brig. General Sam F. Seeley, MC, USA, Walter Reed Army Hospital; (8) Dr. Calvin T. Klopp; (9) Dr. Paul Kiernan; (10) Dr. Joseph M. Barker; (11) Dr. John W. Trenis; (12) Dr. Hugh H. Hussey. All of the speakers for the Midwinter Seminar were physicians from Washington and vicinity, and all of those shown here, with the exception of General Seeley, are members of the District Medical Society.

tient until you diagnose his ailment. We can't lampoon a politician until we analyze his motives. Now, of course, we have one distinct advantage over you in this field. We make mistakes too, but when we flub one, the worst we do is put a few dents in his ego and he's as good as new when the next campaign rolls around!

"One of the primary points of affiliation between the medical profession and cartoonists is: It takes so many years of preparation and near-starvation before they become specialists. Yes, I know a doctor starts out at the tender age of 3 or 4 inspired with a great, shining light of philanthropic desire to administer to the world's physical ills, and he doesn't deviate one student nurse from his goal. The cartoonist, as a rule, doesn't hew to the line quite as objectively, but the great incentive is still burningly present . . . he wants to eat too!"

Turning to his own field, he recalls:

"During my early days, I wandered off into other fields of endeavor. I had brief flings at ranching, forestry, irrigation work, selling, and, during one brief period of low funds, I found a restaurant job highly satisfactory—three times a day. I finally landed a reporting berth with a Southwestern paper. This, on top of my other sorties into the world of business, filled in a lot of education and very fast.

"While less than 10 per cent of America's cartoonists started out as reporters, the other 90 per cent plus wish they had. To have served even a brief stretch as a story-getter and teller teaches a newsman how to look for news and how to recognize it when he finds it. Reporting is a deluxe school for hopeful cartoonists.

"But during the 17 years I've been a political cartoonist, I've never been able to stick my pen into a Republican Administration! Not that I'm anti-Democrat. No! I'm just anti-5 percenters, mink-coaters, deep-freezers, RFCers, free Florida-trippers and tax-fixers. And I firmly believe that there are 47 other states besides Missouri capable of producing leaders and statesmen. (You remember that old saying, 'You've got to show me, I'm from Missouri!' It's been changed in the last 5 or 6 years; now they say, 'I'll show you . . . I'm from Missouri!)

"You know, some of my critics have tagged me a 'crusader'. Well, now if they thought they were ridiculing me, it certainly backfired. I like it! I very much like being a crusader for American principles. The term free press is closely allied to freedom of speech. I feel sure everyone here will agree with me when I say that the newspapers and magazines of this country must never be the instruments of Government policy."

But Mr. Berryman could not be serious for long. Here he ribs the doctors again:

"Speaking of specialists, now, there's where you fellows have leaped ahead of the cartoonists. Thirty or forty years ago, one good old family doc handled the situation from cradle to grave. But of course that was before cardiology, neurology, endocrinology, gastroenterology, and so on. (If I pronounced any of those words correctly, it is pure coincidence.) So, of course, today's medical man has to channel his practice to be on such familiar terms with his special line that he can tell his patient what a wonderful disease he has been privileged to contract.

"But we poor ink-stained wretches haven't progressed. When one of us gets confronted with a difficult composition, he must study it out, work up the picture, render it himself to the last detail. How backward we are. We haven't reached the Drawing Utopia where we call in another cartoonist who draws left ears, still another who specializes in picturing right eyes, or a pediatoonist who can deftly deliver an appealing child on paper, nor a gynec-artist to handle the pretty girls, nor a bone-penman to portray the skeletons in the administration closet. No! Sad to say, we are still in the family doctor class, except that we can't get by any more on one old stock bottle of pills. We now have to have a thinking-drawing knowledge of everything from the Spirit of '76 to a Sabre Jet.

"However, just as you have kept a few old faithfuls in your little black bags we keep some old reliables in our ink-bottles to use when we get stumped.

"Cartoonists, like successful doctors, have to lean slightly toward exaggeration. It is often necessary to bring a point home. I suppose many of you have heard the story about a party of doctors who got together for a fishing trip in New England. Three of them started ahead in a small car, the fourth one had a station wagon, so all the fishing and camp gear was loaded in it, and he was to follow along behind. But when the trio got to the prearranged spot, there was no trace of Doc Smith, not even a dust cloud. Two hours went by, when finally Doc Smith chugged up beside the impatient party.

"He said, 'Sorry to hold you up, fellows, but I got a call right after you left and now you can congratulate me. I've just delivered a 27-pound baby boy!'

"The first one of the trio to recover said, 'That I'll have to see, Smitty!'

" 'So help me,' Doc Smith answered, 'It's a fact . . . there weren't any baby scales around, so I weighed him with the fishing scales you boys left in my car!'

"But now, another point of dis-similarity between our professions. Your stock goes up in your customer's—pardon me, patient's—esteem, when you delve into the realm of incomprehensibility. We can't get too smart for the guy with a nickel for his evening paper. Some years ago, a Washington cartoonist used Noah's ark as the theme for a political cartoon, with F.D.R. as Noah and all his alphabetical bureaus as the animals. The artist took the first edition of the paper with him when he went to lunch in his favorite beanery. His regular waitress came up and said, 'Lemme see what picture you drawed today.'

"The girl looked at it, kind of puzzled, and asked, 'What's that boat doin' up on that mountain?'

"The cartoonist said, 'Why, that's the flood with Noah and the ark!'

"The waitress said: 'Ain't that terrible. I didn't know there'd been a flood. I went to the movies last night an' was lookin' at Clark Gable while all that was goin' on!' "

Here is what Mr. Berryman had to offer on the Nation's Capital.

"I have often heard Washington called the medicine man's mecca. That I can understand. If a man isn't suffering from sinus, chronic bronchitis and rampant ulcers when he moves here, the climate and the pace of this Paradise on the Potomac will soon have him wedged into your waiting rooms. And there are enough plushy Government jobs hereabouts for a few hundred thousand people who used to take double castor oil back home and now take a double Martini. They seem to be able to afford a specialist to tell them they 'hadn't oughter done it.'

"And, seriously, Washington is the journalist's mecca, too! This city is more than just the Capital of the United States. It is the Capital of the Free World! Global as well as domestic policy is made here. Hence, it necessarily follows that here is the goal of every newsman. For it is right here that he is close to the pulse of a world which is awfully sick in spots! I sincerely wish our Doctors of Diplomacy could even approach the progress you gentlemen and your colleagues over the world have made in your profession.

"To be chief editorial cartoonist for the largest paper in this world-capital is a grave responsibility. No matter who draws a front-page cartoon for a great metropolitan daily, his pictured editorial has a prominent place every 24 hours. His integrity in the conduct of his feature must be unquestioned. It can do great good or severe harm.

"A cartoonist, a feature writer, a commentator has to make up his mind early to work. That's something a doctor so well understands, too. Few other fields of endeavor are so demanding of time and effort as our two! Our generation, and the ones before us, did not believe work was a nasty word. And few professions require the long, grueling apprenticeships ours do. During the long early years you spent patching up razor-slashes on Saturday nights, I was drawing pots and pans for Lansburgh's and Hecht's Friday Bargain Sale advertisements.

"Criticism of big government and its constant tearing down of the will to work on the part of the individual furnishes the theme of scores of my pictures every year because I am absolutely convinced that the handout state can lead only to the handcuffed state."

Mr. Berryman concluded on the following biographical note:

"As a newspaperman, covering his assignments, illustrated and/or written, I've had my share of heartaches, headaches and happy endings! I was borrowed by the FBI to assist in the Lindbergh and Mattson kidnapping cases. I was verbally chastised by Franklin Roosevelt for drawing him in his underwear. I flew with the Navy's anti-submarine patrol in '42 and '43 and watched the Atlantic shoreline become a greasy black outline as Hitler's U-boats destroyed American ships. I was bumped around in jeeps, and nearly asphyxiated in a Sherman tank. Just last year I traveled the eerie, gray-green substratosphere in one of General Le May's great strategic Air Force's atomic bombers. I've covered political conventions and campaigns, sketched the principals in notorious murder trials, sat on the hard press bench at heavyweight championship fights and world series, and have been mashed against the rail at the finish line of great American turf classics. I've sat in rain, sleet and snow as Army and Navy battled for supremacy with a soggy piece of pumped-up pigskin (I think the Air Force is still leading by one touchdown!). I have been kissed and cussed by both Democrats and Republicans and upbraided by Mrs. Harry Vaughan for not showing proper respect for her husband, that great 2-star military man and leader.

"But with all that has gone before, the newspaperman looks expectantly to the future. Sort of like the story they tell of the arrival in Britain of a shipment of fresh eggs from the U. S. One store received its meagre allotment and the proprietor immediately put up a sign in the window: 'These eggs are for expectant mothers only.' Quickly a line formed, and as it moved up, one woman whispered to the clerk: 'Please put a dozen eggs under the counter for me. I'll call for them in the morning.'

"Now, I know how excited and thrilled you gentlemen can get over a pretzel-shaped appendix; it's the same excited thrill I experience when the news breaks of a juicy new administration scandal! Don't you think we are in the world's two best professions?"

T. W.

SPECIAL REPORT OF THE EXECUTIVE BOARD*

Another business meeting of the Society having been scheduled for March 5, 1952, this report will be limited to matters which can be readily disposed of.

Election of Major General George E. Armstrong to Honorary Membership: Members who attended the special business meeting of the Society on October 31, 1951 will recall that the Board proposed Major General George E. Armstrong, Surgeon General of the United States Army, for Honorary membership. As required by the Constitution and By-laws the proposal has since been submitted to the Board of Censors, which has given its approval.

While a biographical sketch of General Armstrong has been presented previously, a brief résumé of his career should probably be made at this time.

General Armstrong is a native of Indiana, where he not only obtained his early education but in 1925 received his medical degree from the State University. A long successful military career began when he was commissioned First Lieutenant in the Army Reserve Corps. In World War II he served as Assistant Surgeon of the China-Burma-India Theater and as Surgeon of the China Theater. He returned to the United States in 1946 to become Chief of Personnel in the Surgeon General's Office. In 1947 he was appointed Deputy Surgeon General.

The Senate confirmed General Armstrong's appointment as Surgeon General of the Army for a four-year term beginning June 1, 1951.

General Armstrong is a Fellow of the American College of Surgeons and the American Medical Association and a member of the Association of Military Surgeons of the United States. He is presently a member of the House of Delegates of the AMA.

Many honors have come to General Armstrong and the Board feels privileged to recommend him for election to Honorary membership.

Nomination for Vice President of the Washington Academy of Sciences: The Board has again nominated Dr. Frederick O. Coe to succeed himself as Vice President of the Washington Academy of Sciences representing the Society. Dr. Coe has filled this post in a very satisfactory manner for many years.

Appointment to Board of Trustees of Group Hospitalization, Inc.: At its meeting on January 28, 1952 the Board discussed at length the appointment of a successor to the late Dr. Oscar B. Hunter, whose term on the Board of Trustees of Group Hospitalization, Inc. expired this year.

As many of our members know, there have been differences of opinion over the recent revision of GHI's subscriber-contract, particularly in regard to obstetrical benefits. The Board took a hand in this matter when its Chairman and Secretary called upon the President and Director of GHI to protest the reduction in obstetrical benefits. However, they were informed that the decision had been made and the provisions of the new subscriber-contract could not be altered.

In considering the appointment of Dr. Hunter's successor the Board was of the opinion that a practicing physician having a special interest in obstetrics should be appointed. It chose Dr. Howard P. Parker, whom it considers an excellent choice. It believes that you will concur in this view and will approve Dr. Parker's appointment.

Honorary Membership for Major General Harry G. Armstrong Proposed: The Board wishes to propose another eminent physician for Honorary membership, Major General Harry G. Armstrong, the first Surgeon General of the newest independent military service, the United States Air Force. General Armstrong has 20 years of research, administration and field service with the Air Force and its predecessor, the Army Air Corps, to his credit.

He began his military career as an enlisted man, serving with the Marines in World War I. He received his M.D. degree in 1925 from the University of Louisvile and subsequently studied at the School of Aviation Medicine, Brooks Field, Texas, the Army Medical Center, Washington, D. C., and the Medical Field Service School, Carlisle Barracks, Penna. Later General Armstrong received an M.S. degree from the University of Cincinnati and an M.A. degree from the University of Toronto.

His military assignments include that of military attache at the U. S. Embassy in London in 1941 and Assistant Surgeon, then Surgeon, of the Eighth Air Force during the War years. Later he was Surgeon of the Air Division, Office of Military Government for Germany.

General Armstrong established for the Air Force its two major medical research centers at Randolph Field and Wright Field. Following the war, he returned to Randolph Field as commandant of its School of Aviation Medicine.

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* Adopted at a special business session of the Medical Society of the District of Columbia, February 21, 1952.

He has made a reputation through his work on pilot protection and over-all safety in aviation. In 1937 he won the Wellcome Award for the best medical military essay, in 1939 the Collier Award for the greatest achievement in aviation, and in 1941 the John Jeffries Award for the greatest achievement of the year in aviation medicine.

Your Board is honored to present such a distinguished physician for Honorary membership.

Conclusion: Again your Board wishes to remind those present of the very important business meeting on March 5.

SPECIAL REPORT OF THE EXECUTIVE BOARD*

This is your Board's final report before the Annual Business Meeting which will be held on May 7, 1952. At that time the Board will render an accounting of its stewardship during the entire organization year.

As will become apparent, some of the matters presented for your consideration in this report are of more than ordinary significance. Your Board wishes you to know that its decisions with respect to them were arrived at only after lengthy and thoughtful deliberation.

Medical Care Program for Laborers' Union: Late in July, 1951 Mr. Arthur A. Peisner, Administrator of the Operating Engineers Trust Fund, Mr. Leo Nazdin, President of the Laborers' District Council, A.F.L., and Mr. Marinus Koster, Certified Public Accountant for the Council, called on our Secretary. Mr. Peisner explained that he was also administrator of the health and welfare fund of the Laborers' District Council, which had been established in accordance with the provisions of the Taft-Hartley Act. The Council consisted of seven locals (component unions) and about 5,000 male laborers, 90 per cent of whom were negroes. When their families were included they numbered in all about 25,000 persons.

To protect the stability of its funds, the Council insured its members, paying premiums in the amount of $500,000 annually. On its part the insurance company promised to pay $1,000 in the event of death and sick benefits plus medical and hospital care in stipulated amounts.

In the year and a half since the insurance coverage became effective, very few union members have taken advantage of the medical service benefits. In fact, expenditures for such benefits have been virtually nil. Obviously, the union representatives said, their members were not seeking needed medical care either because of ignorance or because of hesitation to go to a doctor's office. Something, they insisted, had to be done about the situation, and the help and advice of the Medical Society were therefore being sought.

The union representatives suggested a two-fold program: (1) an intensive effort to enlighten union members in regard to the importance of early diagnosis and treatment of their illnesses; and (2) an adequate medical service program. In regard to the latter it was proposed that a clinic be established to which union members would go for both diagnosis and treatment.

It was pointed out that members of the Laborers' Union were of the lowest income group and the clinic idea seemed to be the only feasible one.

The matter was referred to the Society's Committee on Medical Care, the Chairman of which appointed a Subcommittee, of which Dr. Clayton B. Ethridge was Chairman, and members were Drs. Philip A. Caulfield and George R. Farrell. Subsequently Drs. Donald Stubbs and Charles Stanley White were appointed.

Shortly after their appointment the Subcommittee conferred with union officials and representatives of the Medico-Chirurgical Society of the District of Columbia, Inc. who had been included because of the large percentage of negro laborers involved. Several meetings were held and on November 16,

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* Adopted in part at a special Business Meeting of the Medical Society of the District of Columbia, March 5, 1952. One proposal was amended and another tabled, as indicated in this report.

1951 the Subcommittee submitted to the Committee on Medical Care the following recommendations:

1. That a Medical Advisory Committee to the Laborers' Union consisting of members of the District Medical Society and the Medico-Chirurgical Society, Inc. be appointed immediately.

2. That this committee submit several names of physicians to the Laborers' Union who are qualified and acceptable from a professional standpoint to serve as the Union's medical director.

3. That the medical director, with the assistance of the Medical Advisory Committee, proceed to develop an adequate medical care program for the Laborers' Union, 85 to 90 per cent of whose members are negroes.

4. That a clinic be established for union members and their dependents, the clinic to be staffed and operated in a manner approved by the Medical Advisory Committee. Where union members or their dependents desire to do so, they will be permitted to obtain medical services from a private physician, such services to be paid for by the Union.

The Committee approved and forwarded these recommendations to the Executive Board which also endorsed them. They are submitted to you tonight for your approval.

It perhaps should be explained that the union officials who participated in the above meetings administer several other health and welfare funds for workers having a higher level of income. There is no desire to set up a program similar to the above for these groups. They will continue the ordinary relationship of patient and physician. It is only for this very low income group, largely made up of persons who would not ordinarily go to private physicians, that a clinic is proposed.

Summary of Membership for 1951: The total membership at the beginning of 1951 was 1,736 and at its close, 1,777. The greatest gain was shown in the Associate classification, which increased by 37 members; there were only 4 more Active members at the close of 1951 than there were in the beginning. It would appear that the number of physicians in Washington has reached a maximum figure and that the Society's total membership will remain static for some time.

One trend has been noticed since the beginning of the year and that is that quite a number of District physicians have moved to nearby suburban areas. However, the saturation point in those communities will undoubtedly be reached in the near future.

Annual Financial Report for 1951: [Space limitations will not permit the publication of the Report and the Budget. Members who are interested and could not attend the Business Meeting at which they were presented can obtain copies by calling the Society's office.]

Election of the Nominating Committee: Again this year the election of this Committee was conducted in a manner prescribed by the Society. Twenty-one members of the Society, chosen by the President and confirmed by the Board, were placed on ballots which were sent to all Active and Life members. As a result of the voting, the following, having received the highest number of votes, were elected members of the Nominating Committee: Drs. Ralph M. Caulk, Clayton B. Ethridge, Lloyd G. Lewis, Arch L. Riddick, R. Lee Spire, Donald Stubbs, and Bernard J. Walsh.

Immediately following the reading of this report the Committee will submit its nominees for offices in the Society.

As all members were informed in the notice of this meeting, the Committee will present the name of one physician for each office. Nominations can be made from the floor but as provided by the Constitution-and-By-laws must be made at this meeting.

Proposed Vote on Election to Membership of Negro Physicians: Before presenting for your consideration its recommendations with respect to this matter, your Board wishes to review briefly developments over a period of two years.

1. In its Special Report at the Business Meeting of the Society held on March 1, 1950, your Board directed attention to the Society's past relationships with the Medico-Chirurgical Society of the District of Columbia, Inc. It was reported that spokesmen for the Medico-Chirurgical Society had urged the acceptance of negro physicians as members.

The Board recommended that our Society extend an invitation to members of the Medico-Chirurgical Society to attend the regular meetings of our organization and that a joint committee be established consisting of members of the Medical Society of the District of Columbia and the Medico-Chirugical Society which would devote its attention to community health projects in which both groups had a logical interest. These recommendations were approved.

2. On March 7, 1951 in its Special Report to the Society, the Board directed attention to the fact that admittance of negro physicians to membership had come up from time to time since its previous recommendations were adopted. It suggested to the Society that it would be desirable to determine the attitude of the membership should an application be received from a negro applicant and proposed an "opinion poll."

Members would be asked to return a form sent them indicating thereon their answer ("Yes" or "No") to the following question: "Are you in favor of the election of qualified negro applicants to membership in the Medical Society of the District of Columbia?"

Members would also be advised that the forms were to be returned not later than April 1, 1951. The results of this inquiry, the Board stated, would be made known at the Annual Business Meeting on May 2, 1951 and the Board of Censors would then be notified of the results.

The report containing the above proposal was accepted by the Society.

3. At its Annual Business Meeting on May 2 the Board, in its Supplementary Report, reported under a heading "Survey of Society Opinion on Membership of Negro Physicians" that "1,381 Active and Life members" had been sent forms. On April 1, 1951, 966 members had "voted." Of this number 674 voted "yes," 290 voted "no," and 2 forms were not counted because the "votes" were qualified.

As promised at the March business meeting, the Board notified the Board of Censors of the result of the poll. No comment was made by the Executive Board in transmitting this information.

4. Shortly after the above report, four applications were received from negro physicians. These were handled in the routine manner and finally reached the Board of Censors. The applicants were interviewed and thereafter the Board of Censors considered what action it should take. It was the Board's conclusion that while the Society's Constitution and By-laws did not prohibit the election of any qualified physician, regardless of race, that in the 134 years of its existence no negro physicians had been elected to the Society. The Board did not feel that in the circumstances it could act on the basis of an opinion poll. It urged that a formal vote be taken which would in effect be a mandate to the Board of Censors.

This matter came before the Executive Board at its meeting on December 17, 1951. All members of the Board of Censors were present. The latter stated their views and the Board voted to recommend to the Society that a formal vote be taken on the following resolution:

> "RESOLVED, that no qualified physician applying for membership in the Society shall be denied membership because of race, creed or color."

If you approve, a vote will be taken on Wednesday, April 2, in the Society's building. The "polls" will be open from 9:00 a.m. to 5:00 p.m. on that date. Each member will be checked off when he votes as is done in the election of officers when there is more than one candidate for an office. Ballots will be deposited in a locked ballot box which will be opened only in the presence of the tellers appointed by the President.

Your Board will report the results of the vote at the Annual Business Meeting on May 7, 1952.

Nomination of Member of Board of Trustees of Medical Service of the District of Columbia:* The By-laws of Medical Service of the District of Columbia provide that 7 of the 11 members of its Board of Trustees shall be nominated by the Medical Society of the District of Columbia and upon election by participating physicians shall serve for a period of three years.

Your Board has been notified that the term of office of Dr. Charles Stanley White, President of Medical Service, will expire in April. It recommends that he be nominated to succeed himself.

Reorganization Plan for the District of Columbia†: On January 30, 1952 the Society's Committee on Public Policy held a meeting attended by Brig. General Bernard L. Robinson, Engineer Commissioner for the District of Columbia, and Dr. Daniel L. Seckinger, Director of Public Health. The purpose of the meeting was to discuss with these officials the proposed Reorganization Plan for the District of Columbia.

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* This proposal was amended to include the nomination of Dr. James A. Dusbabek.

† After some discussion this recommendation was tabled.

In his letter transmitting the Reorganization Plan to the President of the Board of Commissioners on November 24, 1951 General Robinson had stated:

"A preliminary plan of reorganization is presented herewith for discussion purposes. Its major features are designed to correct fundamental weaknesses in the existing municipal structure. These features are:

a. Integration into the municipal government of all essential activities.

b. Centralization of control with clear delineation of authority and responsibility at all levels.

c. Granting of permanent authority to the Board of Commissioners to effect sound reorganization within the goverment on a continuing basis to meet changing conditions."

In his discussion with the Committee, General Robinson stated that he would welcome any suggestions which the Committee had to offer.

Basically, the proposed plan contemplates that each Commissioner will head a bureau. There would be a Commissioner of Public Safety, a Commissioner of Public Welfare, and a Commissioner of Public Works.

Under the Commissioner on Public Welfare would be a Bureau of Welfare. Among other departments the Bureau would have under its direction a Department of Health and a Department of Hospitals. Under the Health Department's supervision would be the coroner, the morgue, the Board of Police and Fire Surgeons, the Board for Condemnation of Insanitary Buildings, and the Anatomical Board.

The Commission on Licensure to Practice Healing Art would be removed to the jurisdiction of the Commissioner on Public Safety under the Department of Commerce and Labor.

Following careful consideration of these proposals the Committee voted to submit the following recommendations to the Executive Board:

1. That the Society record itself in favor of designating the Commissioner on Public Welfare, the Commissioner on Public Health and Welfare.

2. That separate Bureaus of Public Health and Public Welfare under the Direction of the Commissioner on Public Health and Welfare be created.

3. That the Department of Health and the Department of Hospitals be consolidated and designated the Health Department and that this Department be placed under the Bureau of Public Health.

4. That the present relationship between the Commission on Licensure and the D. C. Health Department be maintained.

5. That the Board of Police and Fire Surgeons maintain their present relationship under the Police and Fire Departments rather than be placed under the Health Department.

6. That the coroner's office operate as a separate entity rather than as a subsidiary agency of the Health Department.

7. That the Commission on Mental Health maintain its present independent status.

8. That the Home for the Aged and the District Training School be maintained as at present until such time as a chronic disease hospital is established.

The Board gave consideration to these recommendations at its meeting on February 25, 1952. It did not fully concur with the Committee's recommendations and voted to endorse them in modified form for action by the Society this evening. The Board's actions follow:

1. Approved.

2. Disapproved. That there be one Bureau of Public Health and Welfare.

3. Approved.

4. Approved with the recommendation that all licensing boards in any way related to the care of the sick or the public health field retain their present status or where indicated be placed under the Health Department.

5. Approved.

6. Disapproved. Recommend that the morgue and coroner's office be placed under the Health Department.

7. Approved.

8. Disapproved. Recommend that the Home for the Aged and the District Training School be put under the Department of Health and Hospitals.

Establishment of Medico-Legal Commission: Since this report has already become lengthy and the joint meeting of the Society and the D. C. Bar Association is to begin at 8:45 p.m. your Board has decided to hold this matter over for discussion until the Annual Business Meeting on May 7. It will then present the details in regard to the Commission which it has approved for an experimental period of six months.

Conclusion: To those of you whose patience may be exhausted by these reports, not all has been said that could be said about the subjects referred to. If anyone desires further details they will be provided upon request by me or the Secretary of the Society.

Respectfully submitted,

Raymond T. Holden, M.D., *Chairman*
William M. Ballinger, M.D.
Frank D. Costenbader, M.D.
Walter Freeman, M.D.
John Minor, M.D.
Herbert P. Ramsey, M.D.
Wallace M. Yater, M.D.
Theodore Wiprud, *Secretary*

NOMINATIONS

The following nominees for elective offices were presented by the Nominating Committee at the business session of the Medical Society of the District of Columbia on March 5, 1952:

For President-elect:
Herbert P. Ramsey
For First Vice President:
Maurice A. Selinger
For Second Vice President:
Cecile L. Fusfeld
For Member of Executive Board:
William Ross Morris
For Member of Board of Censors:
Fred O. Coe
For Delegate to American Medical Association:
Raymond T. Holden
For Alternate Delegate to American Medical Association:
Herbert S. Gates

Elections to the above offices will be held at the annual business meeting of the Society, May 7, 1952.

WOMAN'S AUXILIARY NOTES

The members of the Woman's Auxiliary to the Medical Society of the District of Columbia were hostesses to the members of the Auxiliaries of the neighboring medical societies of Montgomery and Prince Georges Counties (Maryland) and Arlington County and Alexandria City (Virginia) on April 9 at their regular meeting. The speaker at this meeting was Mr. Jennings Randolph, Assistant to the President of the Capital Airlines and a former member of Congress; his subject was "Getting Out the Vote."

On April 26, at the Wardman Park Hotel, the Auxiliary will sponsor a benefit dinner dance. The proceeds from the dance will go toward the nurses' scholarship fund and it is hoped that two additional scholarships may be added, making the total six. The Ways and Means Committee, Mrs. John Edward Morris, *Chairman*, and the Social Committee, Mrs. M. Noel Stow, *Chairman*, promise a very entertaining program. All are urged to join in the activities of the evening; make your reservations early by calling Mrs. Stow at Ordway 7933.

The officers for the coming year were elected on March 12. They are as follows:

President-elect: Mrs. Richard H. Todd, who will take office in 1953
First Vice President: Mrs. Duane C. Richtmeyer
Second Vice President: Mrs. M. Noel Stow
Treasurer: Mrs. John A. Reisinger
Assistant Treasurer: Mrs. Stafford W. Hawken
Recording Secretary: Mrs. William J. G. Davis
Assistant Recording Secretary: Mrs. Jefferson J. B. Sebastian
Corresponding Secretary: Mrs. James H. Scully
Assistant Corresponding Secretary: Mrs. David M. Nolan

Mrs. Ernest E. Hadley, who was chosen President-elect last year, will be President of the Auxiliary for 1952–53.

Personals: Mrs. I. Phillips Frohman and Mrs. William R. Stovall, Co-chairmen for the Women's Luncheon Committee at the annual convention of the American Academy of General Practice were well rewarded for their efforts as the luncheon was attended by approximately 750 wives who accompanied their husbands to the convention in Atlantic City the last week in March. Fashions in clothes were featured by the Needlecraft Shop and fashions in furs were shown by Gettleman. The luncheon was held in the Carolina Room of Chalfonte Hotel on Tuesday, March 25. Door prizes were also featured. Mrs. J. P. Sanders of Shreveport, La., wife of the President of the American Academy of General Practice, was the guest of honor. Some brief remarks were made by Dr. Sanders, who stopped in to extend a word of welcome to the assembled guests.

Mrs. Alan Frank Kreglow
Publicity Chairman

Concerning Those Who Work with Us

NURSING

REASONS FOR THE CHANGING FUNCTIONS OF THE PROFESSIONAL NURSE*

HELEN K. POWERS, R.N.

Director of Nursing, George Washington University Hospital, Washington

The outstanding fact in the present nursing situation is a shortage of nursing personnel. This is not limited to any one group of individuals who perform some service for the patient, but we are particularly concerned here with the problem in relation to the professional nurse. We formerly referred to this worker by various terms, among them "trained nurse," "registered nurse," and frequently "graduate nurse." However, we no longer speak of the "trained nurse" and nurses' training, but rather we prefer the terms "professional nurse" and "nursing education"; we imply that a young woman or young man has successfully completed the prescribed course of study in a professional school of nursing and has earned the title, professional nurse.

What changes in the duties of the professional nurse have been effected by the national nurse shortage? In order to provide both the quantity and quality of nursing service necessary to safeguard the health of our citizenry a task of colossal proportions is being met daily in our hospitals. How is this being done? The professional nurse is using the tools at hand, many times new and imperfect tools, but nevertheless she is gradually and surely shaping these to best help her meet the needs of patients.

The professional nurse today finds herself assuming a broad range of activities involved in the prevention and control of disease, the maintenance of positive health and well-being, and the rehabilitation of those physically and mentally incapacitated. She assists in planning individual and community programs for health; she teaches patients and their families, school children, factory workers, and others prevention of disease and maintenance of health. She keeps informed of community resources and refers those in need.

She must be able to teach, supervise, and direct the work of assistants in her field: the practical nurse, nurse's aide, and the volunteer worker. Nursing procedures must be adapted for their use, as well as studied for any necessary revision resulting from progress in medical science.

The knowledge and judgment required to serve intelligently in our modern educational and research institutions are acquired only through continued study and education on the part of the nurse. It has always been necessary to learn about new drugs, their administration, toxicity and contraindications; the new treatments developed as the medical team has progressed in finding new and successful methods of therapy; and even to develop an awareness of research methods in order to participate in this extremely important phase of the physician's work. However, the nurse has not merely acquired a knowledge of these new developments in her field; she has taken over full responsibility for performing many of the treatments, carrying out the physician's written order with little or no instruction from him. For example, what physician today would stop to explain to the nurse how to administer a hypodermic, or read a thermometer, or check a blood pressure? Yet, not too long ago these were the duties of the physician. Within the memory of many of us a blood transfusion was scheduled in the operating room as a major procedure with a physician in full charge; as recently as only 4 years ago a large teaching hospital discontinued the practice of requiring a doctor's presence throughout the administration of a blood transfusion.

Nursing, a comparatively young profession, has progressed a long way since the days when the duties of the nurse centered around bed-making and the giving of baths, the so-called "bedside-nursing" in which the nurse excelled in finding ways to keep the patient comfortable and, I might add, dependent on the nurse. By contrast, the duties of the professional nurse today present a list to stagger the imagination. To illustrate the varied demands made of today's nurse, let us quote a few paragraphs from the report of a spot study that was made in one of our teaching hospitals:

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* Presented at the Annual Convention of the Maryland, Delaware and District of Columbia Hospital Association, November 29, 1951, at the Hotel Statler, Washington, D. C.

> "From an average of 473 patients, 109 were ordered blood pressure readings at intervals of every 15 minutes to once a day. Sixty patients, or 1 patient in every 8, received parenteral fluids or transfusions, and while these were not done by nurses, they required the help of a nurse, and patients were receiving continuous intravenous fluid and required constant attendance.
>
> "The nurses gave gavages, placed fifth leads for electrocardiograms and applied suction to surgical wounds, tracheotomies, chest cavities and throats.
>
> "They managed the apparatus for Wangensteen suction, tidal irrigation, and bladder decompression. They irrigated eyes, cecostomies, colostomies, draining wounds, urethral and ureteral catheters. They gave colonic irrigations. They did artificial respiration in the interval needed to obtain a respirator, and they started the operation of the respirator.
>
> "They applied sterile compresses and painted lesions. They did approximately 230 dressings in a day, and this does not include the times these dressings were taken down to show the wound to a surgeon. They did catheterizations, sitz baths, and turpentine stupes. They used the Danzer apparatus. They gave insulin and taught the patient or his relatives to give the drug and to examine urine. They administered approximately 1,500 medications daily, by mouth or by hypodermic. They had an average of 7 patients a day under oxygen therapy and specialed patients after craniotomies, tracheotomies, and usual surgery. They assisted with lumbar punctures, thoracenteses, paracenteses, and phlebotomies.
>
> "While all this went on, they met the usual expectation of the staffs. They knew, night or day, without directions, what to watch for and report for the thyroidectomies, the breast amputations, and the prostatectomies . . . . It was not necessary to tell the head nurse to watch for toxic symptoms . . . it was taken for granted that all this would be done. It was understood that the nurses would know how to administer drugs and pick up any error in writing the order. They would not be exonerated if by error 4 c.c. of belladonna was written instead of 0.4 c.c., and a nurse followed the written order. The nurses would have been condemned if a patient scheduled for a cataract operation went to the operating room with even a slight symptom of a cold . . . . It was not a simple matter to decide on the evidence of symptoms shown whether or not to call the doctor at 2:00 a.m., or to calculate to a nicety the time the doctor should be called in order to appear in the delivery room at the proper moment, but the right decision was usually made. It would have been very inconvenient for all concerned during those days if the nurses had not known a good deal about the apparatus used in orthopedics, the machinery of the respirators, the oxygen tents, and suction machines, but the fact that they did know was probably never noticed, so long have nurses been considered an extension of all the services in the hospital."[1]

These paragraphs, written in 1942, require even greater expansion in order to more clearly define the nurse's position on the medical team today. She has assumed additional duties resulting from the increasing pressure for nurses to perform venipunctures, insert mushroom catheters, care for patients treated with radioactive medications, and assist with cardiac catheterizations and with intra-arterial injections. Recently, a plastic surgeon requested that the nurses be instructed to change his patients' dressings, using their judgment regarding the condition of the wounds and the tissue transplants in order that his time might be conserved and that he could be freed of the responsibility for more than an occasional inspection postoperatively. And what of future developments in the realm of nuclear physics? What new skills and technics lie ahead to become a part of the nurse's duties?

Until a few years ago "the nursing team" was unheard of. Today's nurse must learn that teamwork in nursing results in a superior quality of nursing service. Therefore, as a staff nurse, she must assume some functions which previously belonged to the head nurse, inasmuch as she serves as head of the team and is directly responsible for the care given by all members of her group.

In addition, the nurse is called upon to function in the realm of public relations in a very unique way. In this confused situation, wherein the public is so little aware of the true function of the nurse or of its own dependence upon the nursing profession, the nurse has the chance of a lifetime to interpret the changing mind of the public to other professions, to hospital boards, and to nursing organizations; and to interpret the new attitudes and viewpoints about health care and the meaning of health to the people who are being served. For example, rooming-in can be considered an imposition by the young mother who expects to be completely relieved of the care of her baby during the first few hospital days. We must teach her that the sooner she gets back on her feet the better she will be; the sooner she gets to know her new baby, the better it will be for her and her baby, as well as for other members of her family. The nurse stands between the medical scientist and the individual whom he serves, to interpret, to teach, to evaluate. Yet, this is basically the task of public relations.

Early ambulation has decreased the patient's hospital stay, resulting in an increase in the actual work load of the nurse. The beds are now filled with acutely ill patients instead of the high percentage of convalescents formerly interspersed throughout the nurse's assignment. More time is spent by the nurse both in patient care and in teaching these patients self-care. The shorter hospital stay results in sending home a patient who must be prepared to look after his own convalescence. He will often require the help of the public health nurse, the visiting nurse, and even the industrial nurse, since the patient frequently returns to his job before he has completely recovered. This creates a need for more nurses to teach, to supervise, or to give actual nursing care outside the hospital.

In this highly competitive society the nurse insists on an improved living standard for herself and members of her profession; she has invested considerable time and money in preparation for her work and feels justified in receiving financial recognition for this. As a result, institutions and agencies find it economically unsound to employ nurses in the ratio formerly used and have substituted large numbers of nurse assistants to provide adequate patient care. Herein, we have two diametrically opposed facts: Medical science constantly adds to the need for highly specialized competent nurses, and the hospitals' accelerated program of patient care has increased the technical aspects of nursing care, but economically it is unsound to increase the number of nurses or to pay for the nurse-specialist on the medical team. We hear from hospital administrators that the budget will stand no more. Yet, if the nurse is to continue to assume more and more responsibility on the medical team, she will continue to invest more in her own education and demand a more attractive economic return.

Let us turn to the subject of nursing shortages, which has contributed immeasurably to the changing function of the nurse. According to recent estimates there are now 322,500 registered nurses in active practice in the United States, of whom 316,500 render services to civilians and 6,000 are in the military service. The Health Resources Advisory Committee reported an estimated requisite of 404,500 graduate nurses to meet civilian and military needs by 1954. This estimate is based on an expected increase in the civilian population of 5,000,000 over 1950, and a possible mobilization of 5 million troops in the armed forces by 1954.

We need 381,886 registered nurses for civilian nursing services alone at the present time to provide minimum service. This deficit of 65,000 registered nurses for civilian services is very certain to be increased if the military services fill their estimated quotas of recruits, 600 for the Navy, 2,000 for the Air Force, and 2,000 for the Army.

The need for more graduate nurses is apparent in the number of closed hospital beds; the American Hospital Association has indicated that hospitals would immediately employ 9.5 per cent more registered nurses if they were available. Nurses in mental disease hospitals in 1949 averaged 1 nurse per 60 patients, or, discounting those in administrative or supervisory positions in these institutions, there was 1 registered staff nurse to every 1,941 patients. It is estimated that 12,500 instructors are needed by schools of nursing at current levels of enrollment, whereas only 5,259 are at present employed.

Approximately 30,000 nurses are graduated each year, and it is estimated that 21,000 or 65 per cent of the total withdraw from the practice of their profession, mostly due to marriage. Of course, since many of these will return to nursing on a part-time or full-time basis, they are not permanently lost to nursing.

The Committee on Careers in Nursing reported in their July 15, 1951 survey that schools of nursing wanted 42,459 students and that 28,910 had been accepted for fall classes on the above date. An obvious obstacle to increasing student-nurse enrollment was found in the smaller classes graduating from high schools this year; we are told that these graduates are the "depression babies." With the exception of the war years, we have the largest student enrollment in schools of nursing that has ever been reported. Still, it is not enough to meet the needs in the health field.

This discussion is not complete without brief mention of the nurse's attitude toward the change in her responsibilities. Although we see many signs of shifting the load, particularly the less technical functions, to new groups of workers, it is encouraging to find that nurses are facing their responsibility by extending and developing their knowledge and skills, seeking out and improving the training courses for nurse-assistants, and turning their time and energies toward devising means of making nursing more attractive to larger numbers of women, both on the professional and nonprofessional level. The aim of the nursing profession throughout these adjustments is to provide both quantity and quality of care for the greatest possible number of patients, to stress health-teaching programs for the public, and wherever feasible to prepare the average citizen to assist both in his own care and in helping his fellow man.

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THE NEW GERIATRIC UNIT AT SAINT ELIZABETHS HOSPITAL

Today an ever-increasing aging population presents a challenging problem to all fields of medicine. It is estimated that 1 in 13 of today's citizens is over 65. With an aging population there is correspondingly an increase in the number of patients with emotional and physical illnesses. To meet the challenge Saint Elizabeths Hospital has recently opened a new geriatric unit, one of the first of its kind in the country.

Structurally and physically it was especially designed and equipped to care for the Hospital's aged population who had hitherto been scattered throughout the many buildings. This building was designed to house a little over 500 patients. It is a five-story building designed particularly to provide the maximum light. Color harmony has been carefully employed throughout the building, in its equipment and furnishings.

A spacious lobby furnished with chrome and blond furniture greets the visitor. Here on the ground level is the supervisor's office and the offices of the medical staff. Detention screens have replaced iron bars and grilles throughout the building. Pivoted windows have replaced the usual window for ease of washing and to eliminate the feeling of confinement. Throughout the building equipment and facilities have been designed to facilitate the care and treatment of this age group. In the rear of the lobby are 2 passenger elevators. Also in the rear is a large kitchen equipped with the most modern of kitchen equipment. Tables and kitchen equipment are of monel metal or aluminum. A service elevator provides direct access to the serving cafeterias on each floor. Both thermos-type food carts and electrically heated tray carts provide patients with hot foods. Two dietitians provide for the special nutritional needs which are so important in the older age group.

On the ground level are located a fully equipped barber shop and a beauty shop, one furnished in robin's egg blue and the other in dusty rose. Appearance and well grooming are essential factors in maintaining dignity and aid materially in the general improvement of the patient. Large storage rooms with adjustable steel shelving provide the space for the patients' personal belongings, such as baggage and trunks. A large auditorium with a seating capacity of 150 provides a suitable place f r conferences, lecture hall for medical students, nurses, etc.

Throughout the building fluorescent lighting is used.

Each ward is designed to house a group of 63 patients. On each ward is a visitor's room entered separately from the lobby on each floor. This is tastefully furnished in green and gray with foam-rubber cushioned chairs and spring-overstuffed plastic-covered divans.

To provide for the special needs of the patients admitted to this Service are aluminum hand rails in the halls and dormitories. This provides not only support but assists in the rehabilitation of the many hemiplegias and others who require some assistance in walking. Floors are of asphalt tile which can be easily maintained. Radiators have been eliminated and forced air through ducts supplies heat to the wards. Control of the temperature is provided in each nurse's office and she is able to control the temperature on each ward. A very large day room with tempered glass observation windows and equipped with plastic-covered, spring-cushioned arm chairs and sofas provides for the necessary comfort of the patients during the day. Throughout the building in the day rooms and dining rooms tables are covered with formica tops to provide easy cleaning and maintenance. Careful planning to equip wards with long-lasting, indestructible, and easily cleansed furniture was mandatory in view of the urinary and bowel incontinence of many of these patients. A large screened porch opens directly off each day room. This porch is also screened with detention screening.

Each ward houses 63 patients in either rooms of 2-bed capacity or on the dormitory. The dormitory houses 48 patients in cubicles of 6 beds each, the cubicles being separated by waist-high glazed tile walls. All dormitory and day rooms, also the dining rooms, are insulated with Celotex ceilings. All day rooms are provided with radio loud speakers and a centrally operated electric clock. It is hoped that in the near future television sets will be provided to augment recreational activities. Books and magazines are provided and circulated by the Hospital librarian.

Beds have been specially designed and all have telescopic legs to permit adjustment to various heights. This is a prime requisite both for the safety of the patients and from the standpoint of the nurse who must give bedside care. Small lights which provide a subdued illumination at night are set in the base of each cubicle and in the corridors of the dormitories. Beds are provided with foam-rubber mattresses with zippered plastic covers. Foam-rubber pillows are provided for all patients. Wherever possible plastic material is widely used for its ease of maintenance. Bedside chairs are of aluminum, and overbed tables and bedside tables are of the latest design.

Toilet facilities are more than ample and here walls and floors are tiled. Low waist-high partitions with rounded corners provide privacy and also support for those able to be up. All commodes are equipped with seat-action flush valves. For those unable to walk Swedish chairs have been provided. The bathing facilities are provided with waist-high bathtubs and hand-operated spray showers. All water controls are centrally operated from locked control cabinets. Waist-high tubs eliminate repeated bending and lifting on the part of attendants and present ease and safety in bathing infirm and feeble patients.

Feeding is either carried on in the dining room or in the day room or dormitory for those patients who are nonambulatory. All dishes and glasses are of plastic and are nonbreakable.

These are a few of the physical improvements that have been incorporated in this building, which mean so much to the care and treatment of patients in the upper age bracket.

This building will be staffed both by psychiatrists and internists so that the emotional and somatic aspects will always be considered.

It is hoped that in the near future research in the many problems, both psychic and somatic, will be instituted and that the numerous problems in the aging process can be more readily comprehended and eliminated.

Unless this phase of life is adequately considered in the near future, medicine will be faced with an insurmountable burden.

THEODORE C. C. FONG, M.D.

MEMBERSHIP

The following applicants for membership will be voted on at the meeting of the Executive Board, April 28, 1952.

For Active Membership

Alfred Baer, Johns Hopkins University—1945
Claude C. Caylor, Jr., Georgetown University—1945
Otto Englehart, Jr., Indiana University—1944
Benjamin L. Jamison, Medical College of Virginia—1947
John Kehoe, University of Chicago—1950
Edward C. McGarry, George Washington University—1947
Howard S. Madigan, Georgetown University—1945
Wesley M. Oler, Columbia University—1943
Meyer Rosenbaum, Tulane University—1944
William J. Schewe, George Washington University—1943
Forrest V. Schumacher, University of Pennsylvania—1945
Joseph L. Sheridan, Indiana University—1943
Bruce I. Shnider, Georgetown University—1948
Arthur H. Simmons, Howard University—1925
Garrett M. Swain, George Washington University—1945
John F. Westfall, George Washington University—1947

For Associate Membership

Clift P. Berger, Medical College of Virginia—1936
Emile H. Bisharat, American University of Beirut (Syria)—1946
Edward D. Freis, Columbia University—1940
Leon L. Gallin, Syracuse University—1949
Vincent H. Gillson, Long Island College of Medicine—1947
Samuel C. Gordon, University of Montpellier (France)—1939
Lorin E. Kerr, University of Michigan—1935
Joseph Leighton, Long Island College of Medicine—1946
Allan M. McKelvie, University of Glasgow (Scotland)—1939
John W. Perkins, George Washington University—1946
Warren G. Preisser, George Washington University—1946
Robert Roland Smith, Western Reserve University—1937

For Affiliate Membership

Forrest M. Swisher, University of Chicago—1940

News and Personals

The Annual Meeting of the Potomac Chapter of the American College of Chest Physicians will be held on Thursday, May 15, in Baltimore, Maryland, in the Small Ball Room of the Sheraton Belvedere Hotel, Charles Street at Chase.

Dr. J. Winthrop Peabody, Professor of Diseases of the Respiratory System, Georgetown University School of Medicine, will be moderator at the morning session. Following registration at 9:30 a.m. the program will open at 10 a.m. with the Presidential Address by Dr. Daniel Leo Finucane, Superintendent and Medical Director of Glenn Dale Sanatorium. Dr. Finucane will speak on "Some Aspects of Tuberculosis in Children." Two other papers will be given during the morning session:

"The Diagnosis and Management of Certain Acute Pulmonary Infections with a Discussion of Their Nonspecific Roentgen Appearance," Dr. Theodore E. Woodward, Associate Professor of Medicine, University of Maryland

"Pneumoperitoneum Treatment of Pulmonary Tuberculosis and Hypertrophic Emphysema," Dr. Andrew L. Banyai, Associate Clinical Professor of Medicine, Marquette University School of Medicine

Each paper will be followed by a question period. A brief business meeting will be held at noon, with luncheon following at 12:30 p.m. The luncheon address will be made by J. Douglas Colman, Vice President of Johns Hopkins University.

Dr. Finucane will be moderator for the afternoon session. The following papers will be presented:

"Clinical Aspects of the Chemotherapy of Tuberculosis, Including Isonicotinic Acid Hydrazide," Dr. Roger Mitchell, Associate Medical Director, Trudeau Sanatorium

"Some Account of the Eleventh Conference on Chemotherapy of Tuberculosis," Dr. Arthur M. Walker, Veterans Administration, Washington

"Segmental Resection in Tuberculosis (Experience in 300 Cases)," Dr. J. Maxwell Chamberlin, Associate in Surgery, Columbia University

"Resection in Pulmonary Tuberculosis," Dr. E. C. Drash, Clinical Professor of Surgery, University of Virginia School of Medicine

At 4:10 p.m. Dr. Paul Roman, Chief of the Department of Radiology, Lutheran Hospital, Baltimore, will conduct a radiological conference. An exhibit on "Cast and Anatomical Study of the Tracheobronchial Tree (for Interpretation of Bronchograms)" by Dr. Bernard Kleiman of Baltimore will be on display. The meeting will adjourn at 5 p.m.

The George M. Kober Lecturer for 1952 will be **Dr. Arthur L. Bloomfield,** Professor of Medicine of Stanford University School of Medicine, who was chosen for this honor by the Association of American Physicians. He will deliver the lecture at Gaston Hall, Georgetown University School of Medicine, on May 1, 8:15 p.m. The subject of his address will be "The Principle of Bacterial Infection in the Upper Air Passages."

Dr. Bloomfield was born in 1888; he graduated in medicine from Johns Hopkins University in 1911. He is a Fellow of the American College of Physicians, a diplomate of the American Board of Internal Medicine, and a member of the Association of American Physicians, the American Society for Clinical Investigation, and the American Society for Experimental Pathology.

The American Committee on Maternal Welfare, Inc. announces a two-year contest to promote research on the so-called "toxemias of pregnancy." The contest is open to students and personnel in the health professions who are not of higher academic rank than instructor, or who are of junior rank on the hospital or other staff with which they are connected.

All theses must be based upon original work done by the authors and must be submitted no later than January 1, 1954. First and second prizes of $500 and $250, respectively, will be awarded later in 1954 at the Sixth American Committee on Maternal Welfare. All theses submitted will become the property of the Committee.

Dr. Fred L. Adair, President of the Committee, explained that the chief causes of the other two leading maternal killers, sepsis and hemorrhage, have been determined and satisfactory methods of prevention and cure are known. But the causes of the group of conditions called "toxemias of pregnancy" are not yet determined.

Full details of the contest can be secured by addressing the American Committee on Maternal Welfare, Inc., 116 South Michigan Avenue, Chicago 3, Illinois.

CALENDAR OF MEETINGS, FEBRUARY 16–MARCH 15

February 16	Washington Psychiatric Society
February 18	Obstetrical Board
February 19	Grievance Committee
	D. C. Chapter, American Academy of General Practice
	Washington Heart Association
February 20	Midwinter Seminar
February 21	Midwinter Seminar
February 25	Executive Board
	Nominating Committee
	Committee on Teaching Technics
	Medical Bureau Committee
February 26	Membership Luncheon
	Section on Pathology
	Health Committee, Federation of Citizens' Associations
February 27	Medical Service of D. C.
February 28	Committee on Cancer Control
February 29	Committee on Medical Care
March 4	Committee on Public Policy
	Subcommittee on Mental Health
	Women's Medical Society
	Registered X-ray Technicians of Washington
March 5	Business Meeting of Medical Society and joint meeting with D. C. Bar Association
	Executive Board, Woman's Auxiliary
	Section on Dermatology and Syphilology
March 6	Committee on Teaching Technics
	Section on Neurology and Psychiatry
	Executive Committee, Gallinger Hospital
	Registered X-ray Technicians of Washington
	Health Section, United Community Services
March 11	Membership Luncheon
	Medical Officers' Reserve Units
March 12	Woman's Auxiliary
	Registered X-ray Technicians of Washington
	Medical Care Services for Civil Defense
March 13	Committee on Social Affairs, Annual Scientific Assembly
March 14	Classification Committee

The 1952 Essay Contest of the Foundation of the American Society of Plastic and Reconstructive Surgery offers awards in Junior and Senior classifications for original contributions in the field of plastic and reconstructive surgery. For plastic surgeons in the specialty not longer than 5 years there are two 6-month scholarships in leading plastic surgery services in the United States, England and Italy. In the Senior classification, the Foundation's annual prize, a Silver Plaque, will be awarded the writer of the best essay presented at the Annual Meeting of the ASPRS. The winning essays, in both classifications, will appear on the program of the forthcoming annual meeting of the Society in New York City in November, 1952. All entries must be received by the Award Committee not later than September 1, 1952.

For further information, address The Award Committee, c/o Dr. Jacques W. Maliniac, 11 East 68th Street, New York 21, N. Y.

Members of the **American Therapeutic Society** are urged to make hotel reservations immediately for the 53rd Annual Meeting of the Society at the Blackstone Hotel, Chicago, June 5–8, 1952, prior to the meeting of the AMA. The annual Get-Together Dinner will be held the evening of June 5. Mr. Paul R. Moyer is Reservation Manager at the Blackstone.

Dr. Oscar B. Hunter, Jr. has been appointed by the President of the Society, Dr. Wendell B. Gordon, to serve as Secretary Pro Tem until the June meeting to fill the unexpired term of Dr. Hunter, Sr.

Under the provisions of Air Force Manual 36-5, as amended, **reserve commissions** are being offered to men and women practicing in all fields of medicine and in all allied specialized vocations. The list of specialists to whom these commissions are being offered includes doctors of preventive medicine, gastroenterologists, obstetricians, gynecologists, allergists, anesthesiologists, ophthalmologists, otorhinolaryngologists, neurologists, internists, general and orthopedic surgeons, radiologists, oral surgeons, periodontists, prosthodontists, medical supply and medical equipment maintenance specialists, sanitary engineers, clinical laboratory technicians, general duty and anesthetist nurses, dieticians, and physical therapists.

Since each classification has a different set of requirements for each grade from second lieutenant to the higher ranks, the First Air Force has set up clerical facilities for promptly answering all queries regarding these commissions. Inquiries should be directed to the Air Surgeon, Headquarters First Air Force, Mitchel Air Force Base, New York.

The U. S. Public Health Service has produced a series of audio-visual materials for use with **patient education in diabetes.** The materials include 11 sound film strips, a pamphlet entitled "Meal Planning Guide and Exchange List," and other printed matter that would be useful to the patient with diabetes.

The D. C. Health Department in coöperation with USPHS sponsored a discussion of diabetes patient education on March 27 at 300 Indiana Ave., N.W. Presiding at the meeting was Dr. Robert L. Smith, Chronic Disease and TB Consultant, USPHS. Dr. Daniel L. Seckinger, District Director of Public Health, spoke briefly. Dr. Elizabeth Hill, Chief Medical Officer, Outpatient Department, Gallinger Hospital, showed how the diabetes kit has been used in Gallinger Hospital.

The Department of Defense has requested the Selective Service System to further postpone, until May, 1952, the induction of 485 Priority I physicians originally scheduled for August and September, 1951. This delay is possible because at the present time there are sufficient numbers of Priority I type Reserve Officers to meet military requirements for individual calls to active service.

Priority I medical registrants are those who participated as students in the Army Specialized Training Program or similar programs administered by the Navy, and those persons who were deferred from service during World War II to attend medical school and who have served less than 90 days in the Armed Forces, the Coast Guard, or the U. S. Public Health Service subsequent to the completion of or release from the programs or courses of instruction.

If, in the future, the number of registrants who accept reserve commissions should fail to meet requirements, it will become necessary to make up shortages through induction.

"Hearing Is Priceless—Protect It" is the theme for the 24th National Hearing Week, May 4–10. This week will be used to acquaint the public with existing programs for prevention of deafness, conservation of hearing and rehabilitation of the hard of hearing. National Hearing Week is sponsored by the American Hearing Society, which has its headquarters in Washington, D. C., at 817 14th Street, N.W. Affiliated with the Society are 115 local chapters, from Maine to California. It is estimated that there are 15 million children and adults whose hearing is below par.

The AMA Committee on Medical Motion Pictures has completed the 1951 supplement to the second revised edition of the booklet entitled, "Reviews of Medical Motion Pictures." This supplement contains 90 reviews from the *Journal of the AMA* of medical and health films which appeared from January 1, 1951 through December 31, 1951. Each film has been indexed according to subject matter. The purpose of these reviews is to provide a brief description and an evaluation of motion pictures which are available to the medical profession.

The Executive Board of the Medical Society of the District of Columbia met in regular session, February 25. Dr. Alfred E. Brigulio was recommended for the position of Deputy Coordinator for Medical Care Services for Civil Defense, following the resignation of Dr. W. Ross Morris. Dr. Luther W. Gray was recommended to serve as Assistant Deputy Coordinator.

Dr. Harry Zehner was appointed to the Committee on Revision of the Constitution and By-laws and Dr. Raymond A. Osbourn to the Classification Committee.

The Section on Gastroenterology met on March 10 at the home of Dr. Lewis Klein. Dr. Jacob Weinstein spoke on "The Use of Parenteral Invert Sugar in Medicine and Surgery."

On January 16 40 members and guests of the Section met for dinner at the Mayflower Hotel prior to the meeting in the Medical Society's building. The guest speaker, in whose honor the dinner was held, was Dr. Charles M. Caravati, Assistant Professor of Medicine, Medical College of Virginia; his subject for discussion was "Jaundice: Its Clinical Interpretation."

The Medical Society's **Section on Ophthalmology** held two meetings during April. The first, on April 1, was a dinner meeting at the Kennedy-Warren. The guest speaker was Dr. Hyman S. Sugar, of Detroit, Michigan, who spoke on "Diagnosis of Early Primary Glaucoma."

On April 14 the Section sponsored an open meeting in the auditorium of the District Medical Society. Mr. T. Keith Lyle, of London, England, addressed those present on "Orthoptic and Surgical Treatment of Non-paralytic Strabismus."

The Section met with the Baltimore Ophthalmological Society for a joint dinner meeting, March 6, in Baltimore at the Sheraton-Belvedere Hotel. Two papers were presented at the scientific meeting following the dinner: "Sensitization and Desensitization," Dr. Ronald Wood, Baltimore; "Retinal Detachment," Dr. C. L. Schepens, Boston.

The Clinico-Pathological Society held its regular meeting on March 18 at the home of Dr. Crenshaw Briggs. Dr. Hugo Rizzoli furnished the scientific paper which was entitled "Pneumocephalus and Rhinorrhoea."

The meeting of the **Washington Psychiatric Society** planned for March 12 was changed due to the sudden illness of the scheduled speaker, Dr. James S. Tyhurst. In its stead the Society met in the Medical Society's auditorium on March 22. The program consisted of a Symposium on the Contributions of Dr. Harry Stack Sullivan in Retrospect. "Theoretical Aspects" were presented by Dr. Alfred H. Stanton, Clinical Director of Veterans Administration Hospital, Framington, Mass.; "Therapeutic Aspects" were contributed by Dr. Mary Julian White, Associate, Washington School of Psychiatry, and Associate Physician, Chestnut Lodge. Discussion was carried on by former associates of Dr. Sullivan.

On April 9, which was designated Residents' Night, Captain Douglas Price, MC, USA, and Lt. Morton Johan, MC, USN, presented a paper on "Psychiatric Observations on the Wounded." Dr. Thomas Griffin read a paper on "Psychodynamic Studies in Alcoholism."

The Annual Dinner Dance of the Society was held on March 14 at the Corinthian Yacht Club.

The Washington Urological Society held its annual banquet at the Mayflower Hotel, March 8. It was well attended, 231 members and guests being present. Dr. Clifford E. Bagley, President of the Society, presided. The guest speaker was Dr. John H. Morrissey, of New York City, who gave a reminiscent address on urology as it was practiced early in the 20th century.

The Society will hold its last meeting of the season on April 21, when new officers for 1952–53 will be elected.

Dr. A. Earl Vivino, Instructor in Medicine, Georgetown University School of Medicine, and Medical Director of the University's Health Service, is conducting a series of **Round Table Conferences on Therapy** at the Medical Center. The conferences are held every other Wednesday at 5 p.m. in Room 101 of the Medical School and are open to all physicians. Following is a list of the topics discussed and the discussors:

February 13:	"The Common Cold," Dr. Vivino and Dr. Charles L. Wisseman, Jr.
February 27:	"Treatment of Common Skin Diseases," Dr. Vivino and Dr. Raymond A. Osbourn
March 12:	"Treatment of Congestive Heart Failure," Dr. Vivino and Dr. W. Proctor Harvey
March 26:	"Treatment of Duodenal Ulcers," Dr. Vivino and Dr. John C. Sullivan
April 9:	"Clinical Aspects of Hyaluronidase," Dr. Vivino
April 23:	"Medical Management of Liver Disease," Dr. Vivino, Dr. Irving Brick, and Dr. Claus Schwarz.

February 16, 1952, was **Alumni Day for George Washington University School of Medicine.** Dr. Daniel L. Borden, Clinical Professor of Surgery, was moderator for the morning session, which was devoted to scientific papers. Dr. Walter A. Bloedorn, Dean of the School of Medicine, extended a welcome to members and guests. Participating in the scientific session were Drs. Brian Blades, Thomas McP. Brown, Angus McI. Griffin, Charles R. L. Halley, Preston A. McLendon, John Parks, Thomas M. Peery, Joseph H. Roe, James W. Watts, and Charles S. Wise. Conducted tours through the University Hospital occupied the afternoon.

Dr. John H. Lyons, President of the George Washington University Medical Society, presided at the Annual Banquet which climaxed the day's activities. As in the past, it was held at the Mayflower Hotel.

DR. CHOISSER HONORED BY GEORGE WASHINGTON SOCIETY
DR. ROGER M. CHOISSER (center) receiving the 1952 Certificate of Award from DR. JOHN H. LYONS (left), President of the George Washington University Medical Society. Congratulating Dr. Choisser is DR. ROBERT H. HARMON (right), Chairman of the Committee on Awards.

The Society's annual Award of Merit was given to **Dr. Roger M. Choisser,** Professor of Pathology, who has been a member of the University staff over a period of 31 years. Dr. Choisser was presented with a medal and a scroll which cited him for outstanding scientific accomplishment, academic attainment, and service to the society and the community. The presentation address was made by Dr. Robert H. Harmon, acting Chairman of the Society's Award Committee, a committee Dr. Choisser has headed for 12 years.

Dr. Choisser is a graduate of the University of Chicago and Rush Medical College. He interned at the Naval Medical Center in 1917 before being ordered to Haiti, where he served with the "Devil Dogs." He returned to the United States in 1920 to become pathologist at the Naval Medical School, but in 1925 returned to Haiti where he was pathologist and Director of the Public Health Service Laboratory. For his work on yaws while in Haiti he was awarded that country's Honor of Merit and the title of Chevalier.

Dr. Choisser was President and founder of the D. C. Civilian Defense Blood Plasma Bank of World War II, which utilized the surplus blood plasma held by the old Office of Civilian Defense.

He is a Fellow of the American Medical Association, the American College of Physicians, and the College of American Pathologists, a diplomate of the American Board of Pathology, and a member of the Association of Bacteriologists and Pathologists and the American Society of Clinical Pathologists. He is on the Editorial Board of the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA, and Chairman of the District Medical Society's Section on Pathology and Laboratory Medicine. He is Treasurer of the Washington Academy of Medicine.

The District of Columbia Dental Society held its annual Postgraduate Clinic at the Shoreham Hotel, March 9–12, 1952. The D. C. Medical Society sponsored one of the scientific exhibits, "Benefits from Animals in Research." Several members of the Medical Society participated in the scientific program. On Tuesday afternoon, March 11, Dr. Sterling V. Mead was Moderator at a Panel Discussion on Focal Infection. Participants in the panel were Drs. Arthur Dick, Tomas Cajigas, V. John Murgolo and John A. Reed, all Active members of the District Medical Society. Dr. Daniel F. Lynch and Dr. Karl H. Wood, Associate members, took part in a panel discussion on "What's New in Dentistry?" on March 12, and Dr. Walter Rath, also an Associate member, conducted a clinic the same day on "The Non-pressure (Brush On) Technic, Using Kadon."

Nineteen teen-age daughters of Army, Navy and Air Force officers received caps and certificates as **volunteer nurses' aides** on February 29 at Doctors Hospital. Dr. Charles S. White, President of the Hospital's Board of Directors, praised the contribution which members of the **Junior Army-Navy Guild Organization** (Jangoes) make to the community through hundreds of hours of volunteer service. In order to become an accredited nurse's aide the Jango must complete 100 hours of clinical instruction. Dr. Anson R. Hyde, Vice Chairman of the Hospital's Jango Committee, presided at the exercises.

Ciba Pharmaceutical Products announces that it is discontinuing publication of *Ciba Symposia*, but will continue its publication of *Ciba Clinical Symposia*, which discusses significant current contributions to medical progress. The most recent issue of the former, "History of Allergy," will be the last of the series, which began in April 1939 and which was devoted to the history of medicine. *Ciba Clinical Symposia* was added in 1948.

Dr. Jacob J. Weinstein was in Cuba early in January as guest lecturer at the University of deOriente in Santiago and at the University of Havana in Havana. While in Santiago, January 3 and 4, he addressed medical groups at four institutions:

Saturnino Lora Hospital: "A Comparison of the Intravenous Infusion of Dextrose, Levulose and Invert Sugar in the Normal Human Being"

Military Hospital: "The Tolerance of Postoperative Patients to Rapid Infusions of Dextrose, Levulose and Invert Sugar"

Los Angeles Clinic: "Effect of Intravenous Carbohydrates on the Postoperative Nitrogen Metabolism"

University of deOriente: "A Study of Physiology of the Utilization of Dextrose, Levulose and Invert Sugar." At this conference, Dr. Quevedo, who has also done a great deal of research in sucrose, presented his studies.

In Havana, Dr. Weinstein was a guest of the Department of Sanitation of the University; he was entertained by the President of the Association of Doctors of University Hospitals and by the President of the Association of Alumni of the University Hospitals.

On January 8 he held a conference at Emergency Hospital on "Clinical Application of the Rapid Infusion of Dextrose, Levulose and Invert Sugar in Patients." The following day he lectured on the same subject as it applies to surgery at the Calixto Garcia Hospital, and in the evening he spoke at the University Medical School on "Physiological Application and Explanation for the Results Obtained with Invert Sugar as Compared to Glucose and Levulose."

On January 10 he lectured at the Military Hospital, where he was the guest of Surgeon General Louis Iglesias de La Torre, on "Clinical Application of Invert Sugar versus Dextrose and Levulose in Medical and Surgical Patients."

CALENDAR OF SPEAKERS

The following members of the Medical Society of the District of Columbia have addressed lay groups during the past several weeks. The Society maintains a Speakers Bureau, sponsored by the Committee on Public Relations, through which requests for speakers for lay groups can be filled.

Date	*Speaker*	*Subject or Title*	*Organization*
February 17	Dr. Victor R. Alfaro	Hearing Problems	Washington Hearing Society
March 18	Dr. Reginald F. Lourie	Relationship Problems of the Retarded Child	Association for the Advancement of Exceptional Children of Washington, D. C.
March 26	Dr. Oscar C. Fulcher	Neurosurgical Aspects of Cerebral Palsy	D. C. Society for Crippled Children

GP, the official publication of the **American Academy of General Practice,** has added two Associate Editors to its editorial staff, both Washington physicians and members of the D. C. Medical Society. They are **Dr. Sol Katz and Dr. William S. McCune,** who will assist the Editor, Dr. Hugh H. Hussey, in editing manuscripts and by contributing to various sections in the journal.

Dr. Katz, a graduate of Georgetown University School of Medicine, 1939, interned at Georgetown Hospital and is consultant in internal medicine at the Hospital. He is on the staff of the School of Medicine as Adjunct Clinical Professor of Medicine and holds the same position on the staff of George Washington University. In 1942 Dr. Katz completed a residency in internal medicine at Gallinger Municipal Hospital, where he is now Chief of the Division of Pulmonary Diseases.

Dr. McCune is a graduate of Harvard Medical School, 1935. After serving as House Officer at Massachusetts General Hospital, he completed a surgical residency at Peter Bent Brigham in 1939. Subsequently, he took training in obstetrics and gynecology at the Boston Lying-in Hospital and then entered general practice in Petoskey, Michigan, his home town. Four years later, 1943, he enlisted in the Army Medical Corps. During his Army service he received training in the Neurological Institute of Walter Reed Army Hospital and served on both the Neurological Service and the General Surgical Service at Walter Reed.

After separating from the service Dr. McCune entered practice in Washington. He is Associate Clinical Professor of Surgery at George Washington University School of Medicine and Associate in Surgery at both George Washington and Gallinger Hospitals. He is also consultant in surgery at Walter Reed.

Dr. Robert B. Nelson has recently assumed the position of Medical Director of Planned Parenthood Association of the District of Columbia. Dr. Nelson, an alumnus of the University of Virginia School of Medicine, is on the gynecological staff of Garfield, Doctors, Columbia, and Emergency Hospitals. He is an Active member of the District Medical Society, a Fellow of the American Academy of Obstetrics and Gynecology, and a diplomate of the American Board of Obstetrics and Gynecology. He has served on the medical staff of the PPA since 1946.

Drs. William J. G. Davis, Oscar Lavine and J. Thomas Schnebly attended the Pan American Congress on Ophthalmology in Mexico City, January 6–12. Dr. Lavine presented a paper on "Effects of Ultrasonic Waves on the Refractive Media of the Eye." Dr. Frank D. Costenbader was invited to present a paper at the Congress but was unable to be present.

Dr. Andrew Marchetti and Dr. John Parks were among the speakers at the Fifth American Congress on Obstetrics and Gynecology, sponsored by the American Committee on Maternal Welfare, which was held in Cincinnati at the Netherland-Plaza Hotel, March 31 through April 4.

Dr. Andrew A. Marchetti discussed the "Marshall-Marchetti Procedure for Stress Incontinence" during a meeting devoted to the subject of urinary incontinence. Dr. Parks, participating in a Panel Discussion on Lesions of the Vulva, spoke on "Systemic and Allergic Diseases of the Vulva." The latest developments on proposed legislation for Emergency Medical and Infant Care were presented by **Dr. Joseph Lawrence,** Director of the AMA's Washington Office, at the opening of the sociologic program.

Dr. J. DeWitt Fox, Editor of *Life and Health,* was one of a group of ten representatives of the medical, dental and allied professions chosen from over the Nation to observe treatment being given wounded servicemen aboard hospital ships en route home from Korea.

The group left San Francisco on January 30 on the Navy's seaplane *Mars.* In Pearl Harbor they boarded the Navy hospital ship *U.S.S. Repose* en route to San Diego from Korea with battle casualties. They returned home aboard the *Repose,* observing treatment technics and offering suggestions.

While in Pearl Harbor they were guests for five days of Admiral Arthur W. Radford, USN, Commander-in-Chief of the U. S. Pacific Fleet. They inspected naval installations and medical facilities at Pearl Harbor.

Other physicians selected for the inspection tour were Dr. Harold Diehl, Dean of the University of Minnesota School of Medicine; Dr. J. A. W. Hetrick, Dean of New York Medical College; and Dr. Gilbert Thomas, urologist from Beverly Hills, Calif.

Drs. Carlton Price and Leonard Peterson participated in the program of the Regional Meeting of the International College of Surgeons in Pittsburgh, March 13 and 14. Dr. Peterson was one of three who took part in a Panel Discussion on Artificial Hip Prostheses. Dr. Price collaborated in a Panel Discussion on Ureteral Injuries in Pelvic Surgery.

Dr. Frank D. Costenbader, President of the District Medical Society, addressed the New York Society for Clinical Ophthalmology, March 3, at the New York Academy of Medicine, on the subject of "Bilateral versus Unilateral Surgery for Strabismus."

On March 19 Dr. Costenbader was in Pittsburgh, where he appeared before a meeting of the National Society for Prevention of Blindness. He spoke on "Detection and Correction of Visual Defects in Children."

Dr. A. Earl Vivino, Instructor in Medicine, **and Dr. Robert J. Coffey,** Director of the Department of Surgery, both of Georgetown University School of Medicine, presented a paper at the National Institutes of Health, February 8, on "The Clinical Aspects of Hyaluronidase." All scientists interested in problems related to the mucopolysaccharides of connective tissue were invited. Other speakers at the program were Dr. Olaf Mickelsen, Dr. Evelyn Anderson, Dr. Mary Reid, Dr. Norman Boas, Dr. J. M. Langley, Dr. E. W. Emmart, and Dr. R. M. Cole, all from the National Institutes of Health.

Dr. William J. Tobin, Associate Professor of Orthopedic Surgery, Georgetown University School of Medicine, participated as an examiner for the Part II examinations of the American Board of Orthopedic Surgery, which were held in Chicago, January 23–25, just preceding the meetings of the American Academy of Orthopedic Surgeons. Dr. Tobin gave an instructional course on "Gross Osteopathology" for Academy members.

Dr. Tobin reports that arrangements are being made to hold Part I Board examinations at Georgetown University Medical Center, April 25 and 26.

Dr. Arthur A. Morris presented a paper before the New York Society of Neurosurgery in New York City, February 19, on "Results of Anterior Temporal Lobectomy for the Treatment of Psychomotor Epilepsy."

Dr. Theodore A. Guenther, Chief Anesthesiologist at Georgetown University Hospital, who succeeded to the post after the resignation of Dr. Edward B. Tuohy last November, has resigned and will enter private practice in Cincinnati, Ohio.

The degree of Fellow of the American College of Radiology was conferred in absentia upon **Dr. William P. Hynes** at the annual meeting of the College in Chicago, February 8.

Arthur H. Kruse has resigned as **Executive Director of the United Community Services** to become General Secretary of the Family Service Association in Cleveland, Ohio. He will leave Washington, June 15 and will take over his new post, August 1. Mr. Kruse came to Washington in September, 1948, to be the first Executive Director of UCS. For the four years preceding he had served in the same capacity with the Council of Social Agencies in Akron, Ohio.

Dr. Oliver P. Winslow, Jr. has moved to Coral Gables, Florida. His street address is 3811 Ponce de Leon Boulevard.

Mrs. Olive Tabb, active in the administration of **Children's Hospital** since 1928, died February 27, 1952, at Emergency Hospital, where she had been taken after stricken ill in a taxicab.

Mrs. Tabb was well known to the medical staff of Children's. Her first position was Secretary to Miss Mattie Gibson, when the latter was Hospital Superintendent. She later served as Miss Gibson's assistant and at one time was Hospital personnel director and secretary to the Hospital's Board of Directors. Since 1949 she had been administrative assistant to Administrator Edith A. Torkington. She lived at 4208 46th Street, N.W.

BOOK REVIEWS

Manual of Tumor Nomenclature and Coding, prepared by the Subcommittee of the Statistics Committee, American Cancer Society. Price, $2.50. Pp. 119. New York: American Cancer Society, 1951.

This manual is a compilation of the various names ascribed to tumors of all types. The classification is established on a numerical basis with an attempt made to give the more acceptable term first and then to list the synonyms.

MANNING W. ALDEN, M.D.

Plastic Surgery of the Nose Including Reconstruction of War Injuries and of Deformities from Neoplastic, Traumatic, Radiation, Congenital, and Other Causes. JAMES BARRETT BROWN, M.D., Professor of Clinical Surgery, Washington University School of Medicine, St. Louis, Mo.; Chief Consultant in Plastic Surgery, United States Veterans Administration, Washington, D. C.; formerly Senior Consultant in Plastic Surgery, United States Army and in E.T.O., and Chief of Plastic Surgery, Valley Forge General Hospital, AND FRANK McDOWELL, M.D., Assistant Professor of Clinical Surgery, Washington University School of Medicine, St. Louis, Mo. Price, $15.00 Pp. 427, with 379 illustrations, includng 48 in color. St Louis, Mo.: Mosby, 1951.

"Plastic Surgery of the Nose" is a valuable addition to the growing literature on plastic surgery. It is well that recognition is being given to the need for study on the different phases of plastic surgery, and Brown and McDowell are to be complimented for their concentration on one vital aspect.

The book is both lucid and detailed. Commendably, it deals not only with total reconstruction of the nose but focuses attention, as well, on all minor defects, thus escaping the errors of overemphasis in one direction or other.

The first eleven chapters are devoted to straight cosmetic rhinoplasty with indications for and extent of surgery necessary in given cases. Unquestionably, the increasing demand for cosmetic rhinoplasty and the increased number of physicians performing these operations warrant the space and attention it received in the book.

The direct, practicable approach to complicated problems involving bone and cartilage implants as well as to problems related to reconstruction for tissue loss, the result of injury or tumors, is valuable to both practitioner and student. Especially noteworthy is that portion of the book devoted to secondary corrections of deformity associated with the cleft lip.

One of the virtues of the book is its readability. It is recommended both for substance and for style.

ARTHUR DICK, D.D.S., M.D.

Clinical Pediatric Urology. MEREDITH CAMPBELL, M.S., M.D., F.A.C.S., Professor of Urology, New York University Post-Graduate Medical School; Visiting Urologist, Bellevue and University Hospitals, New York. With a Section on Nephritis and Allied Diseases in Infancy and Childhood by ELVIRA GOETTSCH, A.B., M.D., Associate Professor of Pediatrics, University of Southern California School of Medicine, and Assistant Medical Director of The Children's Hospital Society of Los Angeles, AND JOHN D. LYTTLE, A.B., M.D., Late Professor of Pediatrics, University of Southern California School of Medicine, and Medical Director of The Children's Hospital Society of Los Angeles. Price, $18.00. Pp. 1113, with 543 figures. Philadelphia: Saunders, 1951.

Dr. Campbell has thoroughly revised an earlier text on Pediatric Urology, and as before, his book represents the major reference available dealing primarily with diseases of the genitourinary tract in the young. For his new book the author has incorporated the knowledge gained from 33 years of practice, a review of the world's literature dealing with urologic problems of infancy and childhood, and a study of the protocols of 47,483 postmortem examinations, 15,919 of which occurred in infants and children. The subject material is clearly and concisely presented and is profusely illustrated by well reproduced, representative X-rays and drawings. An extensive bibliography is included at the end of each of the 14 chapters.

"Combinations of obstruction (urinary stasis) and infection constitute over 90 per cent of the major urologic problems in infants and children" and in keeping with its importance almost two fifths of the 1,113 pages has been allotted to an orderly and readily assimilable discussion of the subject. The first of the 3 chapters dealing with urinary tract infections discusses in a general manner the causes and effects of obstruction. This is followed by a comprehensive desciiption of the embryology and anomalies of the urinary tract and the role these anomalies play in causing obstruction. The third chapter presents a detailed description of the pathology, diagnosis, and treatment of the various clinical entities encountered. The discussion of treatment of urinary tract infections is complete and up-to-date, and valuable information on the uses of the newer chemotherapeutic and antibiotic agents is included.

Useful data on nursing care and operative technics employed in treating surgical cases are presented. Other subjects of major urologic interest complete the text; throughout, the subject material is complete and authoritative.

Clinical Pediatric Urology can be recommended unreservedly to the urologist, for it provides expert guidance in the management of urologic problems of the young patient as well as valuable information applicable in the treatment of the adult. The pediatrician will find the book useful for it outlines the necessity, methods, and completeness of a pediatric urologic investigation in the management of diagnostic problems.

William B. Spring, M.D.

Sexual Deviations. Louis S. London, M.D., Diplomate, American Board of Psychiatry and Neurology; Member, American Psychiatric Association; Fellow of the American Medical Association and other medical societies, and Frank S. Caprio, M.D., Member, American Psychiatric Association, Society for the Advancement of Psychotherapy, American Medical Association and other medical societies, with a Foreword by Nolan D. C. Lewis, M.D., Professor of Psychiatry, College of Physicians and Surgeons, Columbia University; Director, New York State Psychiatric Institute and Hospital; Editor, *The Psychoanalytic Review.* Price, $10.00. Pp. 702. Washington: Linacre Press, 1950

This attractive volume of 702 pages, including glossary, bibliography and index, is the result of its two authors' extensive psychoanalytic experience in the field of sexual perversions (more accurately connoted as deviations), and their modern form of interpretation makes it a book truly useful to the medical profession, as well as to jurists, educators and sociologists.

Today psychiatry is no longer satisfied with a description of syndromes, but seeks to elucidate their evolutionary causation, the extent to which they may be influenced, and the specific therapeutic technic required to deal with them. Moreover, the vast field of sexual deviations places upon our modern age the obligation to search for their dynamic motivations and their specialized treatment.

In Part I, i.e., the genetic section, after a lucid historical survey, followed by a description of developing sex impulses in the child, each nomenclatural "deviation" of the sexual instinct is briefly discussed.

Part II is devoted to clinical cases illustrating pertinent psychodynamics: male and female homosexuality, incest, exhibitionism and scoptophilia, frottage, sadomasochism, fetishism-antifetishism, transvestism, coprophilia, urolagnia, bestiality, coprolalia, mixoscopia, pygmalionism, cannibalism, vampirism, kleptomania, pyromania, sodomy, fellatio and cunnilingus, narcissism, and a number of other less known or seldom considered manifestations of abnormal sex life.

Although not all of the cases are discussed in an equally detailed manner, the general outline follows a sequence of identifying data, such as the family setting (the patient's relationship to his parents, and their interpersonal status, his relationship to his siblings, etc.), his personal history, including later childhood, adolescence, education, occupation, religious and social life; the personality structure, including the main character traits, emotional reactions, attitude toward alcohol, the existence of suicidal phantasies (or other clinical psychic abnormalities), early sexual development, psychic traumas, masturbation, homosexuality, heterosexuality, paraphiliac trends, such as narcissism, fellatio, cunnilingus, exhibitionism, voyeurism, etc.; psychosomatic manifestations (anxiety equivalents in the neuro-circulatory system, gastrointestinal phenomena, bladder urgency), snake fear and/or other phobic reactions; finally the transference-resistance relationship to the analyst, a record of the patient's dreamlife, the diagnostic discussion, psychodynamic mechanisms, including psychogenesis, erotic symbolization, insight, prognosis, summary and conclusions.

Treatment results, often placed under a brief "Epilogue," complete the separate presentations, which embody, for the most part, the ideology of Freud and the technic of Stekel.

Much of the interpretation appears to have been made on the Stekelian principle which favors analytic intuition in lieu of the more elaborate and tediously time-consuming classical Freudian technic of multiple cross-associational recordings, evaluations and conclusions.

The volume is well written, with a scientific and dignified manner of presentation, and is informative mainly along the line of pathogenesis and psychodynamics. There is no such detailed description of therapy as a young doctor in psychoanalytic training might attempt to duplicate; for psychotherapeutic operational sequences, in the form of a much desired dialogue-protocol, including the inter-relational action-reaction recordings such as advocated, for example, by Dr. Benjamin Karpman and practiced in certain complex cases for many years by the reviewer, would require a much larger volume which would be of interest only to a limited number of psychotherapeutic experts. It is hoped that some day Drs. London and Caprio will offer such a dialogue-protocol type of presentation to the psychiatric world, which already owes them thanks for their fine collection of psychopathologic and clinical material.

In most of the cases in this volume they have adhered to purely analytic technics, but in certain situations they also found it valuable to utilize additional auxiliary methods, including narcosynthesis and hypnoanalysis. Truth has many facets, many dimensions, and many different paths of approach; the real scientist, in his search for truth, does not dogmatize with one operational tool only, but is willing to apply all available means leading toward that great, hidden knowledge whereby mankind's liberation from its inherent ills may become a more profound reality than it is today.

The book ends on a note of hope for the future lifting of a veil which still beclouds with obscurantism and injustice, ignorance and prejudice, the future medico-legal aspect of the subject of sexual deviation; and it advocates, as one of the possible medico-social remedies, the establishment of an Institute for Sexual Sciences.

This meritorious work fills a real gap in modern medical literature, and is warmly recommended to the profession.

VALENTINE UJHELY, M.D.

Clinical and Roentgenologic Evaluation of the Pelvis in Obstetrics. HOWARD C. MOLOY, M.D., M.Sc., Assistant Clinical Professor of Obstetrics and Gynecology, College of Physicians and Surgeons, Columbia University, and The Slane Hospital for Women. (American Monograph Series.) Price, paper, $2.50. Pp. 119, with 68 figures. Philadelphia: Saunders, 1951.

The most important problem of obstetrics at present is difficult labor. Because cephalopelvic disproportion is the chief cause of difficult labor, many attempts have been made in the past to devise methods to detect this condition.

At first, because of repeated failure to make significant scientific progress in this respect, clinical judgment and intuition had to be resorted to. Eighteen years ago, when Dr. Howard Moloy and the late Dr. William Caldwell took up this problem of cephalopelvic disproportion, their chief concern essentially was to resolve this judgment and intuition into scientific facts.

In this monograph, "The Clinical and Roentgenologic Evaluation of the Pelvis in Obstetrics," the author carries the student through a study of the female pelvis. He has presented interesting historical facts which have led to a better understanding of the morphology of the pelvis. He has described the variations in the female pelvis which are of obstetrical significance, and has correlated these with their effect upon labor. He has shown how, by clinical and roentgenologic methods of examination, the various abnormalities may be recognized and dealt with. Furthermore, he has discussed certain problems which still remain unanswered with the purpose of stimulating future investigations.

Dr. Moloy's undertaking is of definite value for he has better equipped the physician to cope with this practical problem of obstetrics. However, with this new knowledge and with the existence of more precise scientific methods of detection of cephalopelvic disproportion the responsibility of both the obstetrician and the general practitioner has been increased. Consequently, the individual patient in labor is greatly benefited, as many more cases of cephalopelvic disproportion should be predicted and the tragic results ensuing from them should be prevented.

LOUIS JOSEPH MACIULLA, M.D.

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additional current books which, in their opinion, merit comment.

Callander's Surgical Anatomy, 3rd ed. BARRY J. ANSON, M.A., PH.D. (Med. Sc.), Professor of Anatomy, Northwestern University Medical School, AND WALTER G. MADDOCK, M.S., M.D., F.A.C.S., Elcock Professor of Surgery, Northwestern University Medical School. Price, $14.00. Pp. 1074, with 929 illustrations. Philadelphia: Saunders, 1952.

Dynamic Psychiatry: Basic Principles, Volume I. LOUIS S. LONDON, M.D. Price, $2.00. Pp. 98. New York: Corinthian Publications, 1952.

The Battle for Mental Health. JAMES CLARK MOLONEY, M.D. Price, $3.50. Pp. 105. New York: Philosophical Library, 1952.

Standard Nomenclature of Diseases and Operations, 4th ed., published for the American Medical Association. RICHARD J. PLUNKETT, M.D., Editor, AND ADALINE C. HAYDEN, R.R.L., Associate Editor. Price, $8.00. Pp. 1,034, with 4 illustrations. Philadelphia: Blakiston, 1952.

Liver Disease—A Ciba Foundation Symposium. SHEILA SHERLOCK, M.D., F.R.C.P., Consulting Editor, AND G. E. W. WOLSTENHOLME, O.B.E., M.A., M.B., B.CH., Editor for the Ciba Foundation. Pp. 249, with 112 illustrations. Philadelphia: Blakiston, 1951.

A Textbook of Clinical Neurology—With an Introduction to the History of Neurology, 7th ed. ISRAEL S. WECHSLER, M.D., Clinical Professor of Neurology, Columbia University, New York; Consulting Neurologist, The Mt. Sinai Hospital, Montefiore Hospital and Rockland State Hospital, New York. Price, $9.50. Pp. 801, with 179 figures. Philadelphia: Saunders, 1952.

Physician's Desk Reference to Pharmaceutical Specialties and Biologicals, 6th ed. Five Sections. J. MORGAN JONES, Editor and Publisher. Pp. 632. Rutherford, N. J.: Medical Economics, 1952.

COURSEN BAXTER CONKLIN, M.D.

CAT.

COURSEN BAXTER CONKLIN, B.S., M.A., M.D.

(1884–1952)

Dr. Coursen B. Conklin, well known pediatrician, for many years Secretary-Treasurer of the Medical Society of the District of Columbia, suffered a terminal circulatory collapse on March 2, 1952 at his home at 3000 44th Street, N.W., and died while being driven to Doctors Hospital. His offices were at 1801 Eye Street, N.W.

During his forty-five years of practice, Dr. Conklin lived through an important phase of medical history. This was accentuated in his life because of his long years of close association with organized medicine. He was the last of the part-time physician-secretaries to the Medical Society of the District of Columbia, having served faithfully in that capacity for sixteen years. As an officer of the Society he participated in the now famed anti-trust trial in which the American Medical Association and the District Medical Society were defendants. This was the turning point in medical practice and stimulated the development of voluntary prepayment medical plans.

Born in Peekskill, New York, February 3, 1884, Dr. Conklin came to Washington with his family at the age of 10 years. He graduated from Eastern High School and secured his degree in medicine from George Washington University in 1907. He interned at George Washington Hospital and was resident physician at Casualty Hospital. He continued his studies at Bellevue Hospital, New York, and at New York Lying-in Hospital, where he was Assistant House Surgeon. He began his practice in the District of Columbia in 1909. While continuing his practice, he returned to undergraduate studies at George Washington University and completed work for his B.S. degree in medicine in 1916 and for his M.A. degree in 1928.

During his early days of practice he was known as the "doctor to the poor" because of his willingness to make home visits to needy families for little remuneration.

For many years Dr. Conklin was on the staff of George Wsahington University School of Medicine as Clinical Professor of Medicine and Chief of Medical Service of the George Washington Division at Gallinger Municipal Hospital. Other posts he filled were Associate Attending Physician to Children's Hospital and Attending Pediatrician to the Florence Crittenton Home.

In spite of some early physical disability, he served during World War I as First Lieutenant in the Army Medical Corps and reached the grade of Lieutentant Colonel in the Medical Reserve Corps.

He became a member of the old Medical Association of the District of Columbia in 1910 and a Life member of the Medical Society in 1951. He was the Society's Secretary from 1922 to 1938, Vice President in 1939–40, and delegate to the American Medical Association from 1943 to 1949. In 1924 Dr. Conklin started a mimeographed bulletin recording the activities of the Medical Society. In November 1931 he called together a representative group of physicians for the purpose of developing a medical publication and the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA was subsequently launched in January, 1932. Dr. Conklin was the first Managing Editor and continued in this capacity until 1938.

Dr. Conklin was a diplomate of both the American Board of Internal Medicine and the American Board of Pediatrics. He was a Fellow of the American College of Physicians, the American Academy of Pediatrics, and the American Medical Association. He was a member and Past President of the Clinical Club of Washington, the Washington Medical and Surgical Society, and the George Washington University Medical Society. He was also a member of the American Association of the History of Medicine, the Washington Heart Association, the International Medical Club, and the Smith-Reed-Russell Society of George Washington University.

Dr. Conklin leaves his wife, Mrs. Mary P. Burroughs Conklin, and six children, Major Coursen B. Conklin, Jr., a physician with the Army Medical Corps, on duty at Walter Reed Army Hospital; Mrs. Doris C. Arthur, of 4100 South 36th Street, Arlington, Va.; Miss Mary P. Conklin, on duty in Japan for the U. S. Government; Mrs. Elizabeth C. Hoke, of Monterey, Calif.; Harvey B. Conklin, a medical student at George Washington University; and Mrs. Nancy Swinburne, of Marietta, Ohio.

DANIEL L. BORDEN, M.D.

Dystocia due to Fetal Abnormalities—Barter

(*Continued from page 186*)

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Uterine Bleeding—Bieren

(*Continued from page 193*)

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Degenerative Shoulder Lesions—Neviaser

(*Continued from page 195*)

Upon surgical intervention on shoulders of individuals suffering from this syndrome it is found that there is an absence of synovial fluid and that the normally loose redundant capsule is adherent to the cartilage of the humeral head. The capsule can be separated from the head in the manner similar to that of peeling adhesive tape from the skin. It is noted that upon freeing the capsule from the head the cut edges of the capsule retract, indicating that this structure was under tension. An additional finding of interest is that the capsule is greatly thickened. The microscopic sections reveal chronic inflammation consisting of degeneration, vascular repair, cuffing of blood vessels with round-cell infiltration.

Restoration of motion is the aim of treatment in adhesive capsulitis. The usual forms of conservative therapy are well known, and surgery is indicated only when these shoulders fail to limber up under exercises or manipulation.

In summary, I have tried to describe the present anatomicopathologic concept of degenerative shoulder lesions. With proper understanding of the basic lesion the treatment assumes a logical pattern leading to the relief of symptoms.

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Rehabilitation in Poliomyelitis—Gordon

(*Continued from page 202*)

Even a long program such as this does not necessitate retardation of education, since school holiday recesses may be integrated into planning of the various procedures and rest periods. In the case presented here less than 10 days were lost, and he continued in school without setback or special provisions. There is little doubt that many other similar cases could be rehabilitated in similar manner if the pediatrician will lend his support and encourage the family to cooperate in such a program.

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CLINICAL EVALUATION OF A REHABILITATION PROGRAM FOR THE TUBERCULOUS

DAVID LEIBOVICI, M.D.
Medical Officer in Charge, Upshur Street Hospital, Washington

IN 1943 the building which had been the old Tuberculosis Sanatorium of the District of Columbia, now known as Upshur Street Hospital, was reopened as a rehabilitation center for tuberculous patients. It was thought that such a center would serve two important purposes: It would alleviate a serious bed shortage for the treatment of tuberculosis; and it would bridge the gap between the sanatorium treatment of the patient and his return to normal activity in the community, thus reducing the number of patients relapsing and needing further hospital treatment.

That Upshur Street Hospital increases the bed capacity for the treatment of tuberculosis is self-evident. As patients recovering from the disease are transferred to this hospital from Glenn Dale Sanatorium and Gallinger Municipal Hospital, more beds are liberated for the admission of seriously ill patients in the community. To determine whether the rehabilitation program reduced the number of relapses and readmissions was more difficult, and could be done only by a follow-up study of patients discharged from the hospital. Such a study has just been completed, and it is the purpose of this paper to report the results of this study.

It might be well first to briefly summarize the hospital program. Upshur Street Hospital is a 125-bed institution under the administrative supervision of Gallinger Municipal Hospital. Patients are admitted from Glenn Dale Sanatorium, Gallinger Municipal Hospital, and very occasionally from Freedmen's Annex. Requirements for admission are that the patient be a resident of the District of Columbia, have negative sputa and gastric washings, stable X-ray findings, and be ready for such self-care activities as dressing and attending meals in the dining room. Treatment, such as pneumothorax, pneumoperitoneum and thoracenteses, is continued. X-ray films of the chest are taken at 2-month intervals, and laboratory examinations (gastric contents, blood count, sedimentation rate) are done at monthly intervals. Consultation service, when needed, is obtained by referring the patient to the proper clinic at Gallinger Municipal Hospital. Patients with nontuberculous complications requiring surgical treatment are transferred to Gallinger Municipal Hospital and readmitted after the operation is completed.

Occupational therapy is prescribed for all patients, the number of hours prescribed depending upon the amount of activity tolerated prior to transfer to this hospital. The occupational therapy activities consist of woodwork, sewing, weaving, typing, stenography and mimeographing. Hours of activity are gradually increased to a maximum of 6 hours daily. Occupational therapy provides gradually increasing supervised exercise, helps to determine aptitudes and interests, and provides brush-up training in such fields as typing and stenography.

All patients are also seen by the vocational counselor. The counselor is on the staff of the D. C. Tuberculosis Association, assigned to work full-time at this hospital. Based on the medical evaluation of ultimate work capacity, his counseling is guided by the patient's performance in occupational therapy, by the educational and occupational background, and, when indicated, by the results of selected psychologic and aptitude tests. He is chiefly responsible for placing the patient in suitable training or in suitable employment.

A patient's program will vary, depending upon his future plan. For example:

1. The younger patient, whose education was interrupted by illness, is allowed to start part-time courses at one of the local high schools when he is tolerating 4 hours of activity. His activity program is gradually increased, under medical control, and he is discharged when ready for full-time school attendance.

2. The housewife is considered self-employed and is as much in need of gradual increase in work capacity as any person returning to full-time paid employment. In most cases her activity periods are spent in occupational therapy until she has tolerated 6 hours' activity for about 3 months, at which time she may be considered ready to return to her home responsibilities. In some instances housewives have also attended vocational school for part-time courses in sewing.

3. The patient for whom vocational training is indicated is referred to the Office of Vocational Rehabilitation as soon as the field of training is determined. When ready physically, he is allowed to start training in a suitable shop or school. His activities are also gradually increased, and he is discharged when judged ready for full-time vocational training, or, if training has been completed prior to discharge, when ready for full-time employment.

4. The patient in need of gainful employment who has a suitable nonhazardous job to which he can return is allowed to start part-time work when he is tolerating 5 hours' activity, if such work can be arranged. In this way he can be observed under actual working conditions. When part-time employment is not available, he continues build-up of capacity in occupational therapy and is discharged when judged ready for full-time employment.

5. The patient in need of gainful employment but who has no specific skills and who is not suitable for vocational training is in need of selective placement. If possible, he also will start part-time work when a proper job can be found. If not, he continues in occupational therapy and is placed in full-time employment when ready for discharge.

6. There is an occasional patient who is considered unemployable, chiefly because of age. He is discharged when it is felt that his physical capacity is adequate for his future plans.

7. Finally, an occasional patient may not seek immediate gainful employment and decides to continue on limited activity at home. He also will be discharged when his physical capacity is judged adequate for future plans.

Regular staff conferences are held. These are attended by the physician, nurses, occupational therapists, vocational counselor, and medical social worker. At conference the plan for the patient's rehabilitation is reviewed, any modification of program is decided, and finally, discharge is considered when all members agree that existing problems have been met as fully as possible.

The ideal criteria for discharge are:

1. Disease inactive with laboratory examinations negative and X-ray appearance stable.

2. Complications, if present, either not serious or successfully treated.

3. Work capacity demonstrated and adequate for future plans.

4. If gainful employment is necessary and patient is not yet working, prospects for employment fair.

5. Social and home conditions are satisfactory.

It was in order to evaluate this program of rehabilitation that the follow-up study was done. This study was based on the replies to yearly follow-up letters sent by the hospital to former patients, the checking of admissions to other hospitals in the District, and interviews with former patients. All information received, plus the status of patients not heard from, was checked against the files of the Tuberculosis Bureau's Central Registry.

The study was limited to patients discharged from the opening of the hospital in 1943 through December 31, 1949. The status was determined as of June 30, 1951, so that the post-discharge period ranged from a minimum of 18 months to a maximum of over 8 years.

Between 1943 and December 31, 1949 there were 834 patients discharged. However, for the purposes of this study, the follow-up was limited to those patients who were at Upshur Street Hospital more than 1 month and who were discharged to the community with their disease inactive. This group totals 716 patients. Excluded were the following:

63 patients at Upshur Street Hospital less than 1 month
49 patients returned to Glenn Dale Sanatorium or Gallinger Hospital for further treatment of unstable disease
4 patients transferred to Gallinger Hospital with nontuberculous complications
2 patients who died at this hospital (suicide and cardiac)

The 716 patients under consideration were divided into 3 groups, according to type of discharge:

1. Patients who accepted and completed their rehabilitation program and were discharged with medical advice. This group numbered 562.

2. Patients who walked out, against medical advice, thus refusing rehabilitation. This group numbered 74.

3. Patients whose behavior forced a disciplinary discharge. This group numbered 80.

It should be noted that although this shows a nonmedical discharge rate of 21 per cent, it does not represent a true picture of present conditions. The "against advice" discharges have gradually decreased over the years. Thus, there were 33 per cent such discharges in 1943, 28 per cent in 1944, 31 per cent in 1945, 24 per cent in 1946, 21 per cent in 1947, 18 per cent in 1948, and only 11 per cent in 1949.

In the follow-up investigation, information was obtained for 641 patients, the clinical status of 75 patients remaining unknown. The latter represent only 10 per cent of the entire group. It was decided to exclude this unknown group from the statistical analysis. This would have the effect of assuming that the relapse and death rates in this group were similar to those in the known group. Since the unknown group is equally distributed between the discharges with advice and discharges against advice (forming 10 per cent of the former and 11 per cent of the latter), and since the unknown group was also found to have an equal distribution in relation to the various factors studied (age, diagnosis, treatment, etc.), it was felt that such an exclusion would not materially affect the results obtained.

The analysis that follows, then, is based upon a group of 641 discharged patients whose clinical status was known.

There were 505 patients discharged with advice, of whom it was found that

403, or 80.0 per cent, were alive and well
43, or 9.0 per cent, were rehospitalized
37, or 7.0 per cent, were dead of tuberculosis
22, or 4.0 per cent, were dead of other causes

Of the 403 patients who were alive and well at the time of the study, only 37, or 9 per cent, had needed active treatment in a sanatorium after discharge from Upshur Street Hospital. However, since this study was an attempt to determine whether or not rehabilitation reduced the number of relapses and readmissions, all patients rehospitalized after discharge from Upshur Street Hospital, even though well at present, are considered in the following discussion as "rehospitalized."

When the status of the group discharged with advice was tabulated, using this criterion of "rehospitalization," it was found that

366, or 72.5 per cent, were alive and well
80, or 15.8 per cent, were rehospitalized
37, or 7.3 per cent, were dead of tuberculosis
22, or 4.4 per cent, were dead of other causes

The same criterion was used in considering patients discharged against advice. There were 63 patients discharged as "walk-outs," of whom it was found that

27, or 42.8 per cent, were alive and well
23, or 36.5 per cent, were rehospitalized
8, or 12.7 per cent, were dead of tuberculosis
5, or 8.0 per cent, were dead of other causes

There were 73 patients discharged for disciplinary reasons, of whom it was found that

33, or 45.0 per cent, were alive and well
25, or 34.0 per cent, were rehospitalized
12, or 16.0 per cent, were dead of tuberculosis
3, or 5.0 per cent, were dead of other causes

The two groups of "walk-outs" and "disciplinary discharges" have a similar rate of relapse and death from tuberculosis, and for our purposes may be combined into a single group of 136 discharges against advice, of whom there were

60, or 44.0 per cent, alive and well
48, or 35.0 per cent, rehospitalized
20, or 15.0 per cent, dead of tuberculosis
8, or 6.0 per cent, dead of other causes

Thus, of patients discharged with medical advice, 72.5 per cent were alive and well and had never been rehospitalized; whereas, of patients discharged against medical advice, only 44 per cent were alive and well. Before concluding that the completion of rehabilitation was probably significant in the small number of relapses found in one group, and that the nonacceptance of rehabilitation was significant in the larger number of relapses found in the other group, it was necessary to determine that the two groups were comparable with regard to age, diagnosis, treatment, etc., and that none of these factors influenced the rate of relapse or death. McBee-Keysort cards were used in classifying and tabulating the two groups into the various factors analyzed. The findings on tabulation are as follows:

YEAR OF DISCHARGE

When the clinical status of patients discharged with advice was classified by year of discharge, it was found that for each year the percentage alive and well was as follows:

1943 discharges, 63.0 per cent
1944 discharges, 65.0 per cent
1945 discharges, 78.0 per cent
1946 discharges, 80.0 per cent
1947 discharges, 65.0 per cent
1948 discharges, 73.0 per cent
1949 discharges, 87.0 per cent

From its start in 1943, the program of rehabilitation as it exists now has developed and improved gradually. The criteria for discharge also changed gradually. This may explain the lower percentage of patients alive and well among those discharged in 1943 and 1944. That this lower percentage is not solely due to the greater period of time elapsed between discharge and follow-up is shown by the fact that, essentially, there is no change in the percentage for the years 1945, 1946 and 1948. In 1947 the lower number found alive and well was due to an increase in deaths from other causes, a rise to 12 per cent from a previous high of 5 per cent. It might be objected that 1949 is too recent a date of discharge for the percentage alive and well to be valid. This is probably correct. An investigation of the time elapsed between the date of discharge and the date of rehospitalization shows that, of the relapsed patients, 56 per cent were readmitted within 2 years and 77 per cent were readmitted within 3 years. However, since we are primarily concerned with factors which may influence relapse, inclusion of the 1949 discharges increases the number available for study, and their inclusion does not materially change the percentages for the total group. When the discharges from 1943 through 1949 are considered, there were 72.5 per cent alive and well. Eliminating the 1949 discharges, there were 73.4 per cent alive and well.

Classifying the patients discharged against advice by year of discharge, it was found that the percentage alive and well for each year was as follows:

1943 discharges, 16.0 per cent
1944 discharges, 40.0 per cent
1945 discharges, 47.0 per cent
1946 discharges, 47.0 per cent
1947 discharges, 54.0 per cent

The 1948 group consisted of 8 patients, the 1949 group of 4 patients, both too small a base from which to derive percentages.

For the entire group discharged against advice, there were 44 per cent alive and well. With the 1949 discharges eliminated, there were 42.4 per cent alive and well.

AGE

The age of patients discharged with advice ranged from 15 years to over 70 years, with 63 per cent between 20 and 39 years of age. The age of patients discharged against advice ranged from 15 years to 69 years, with 67 per cent between 20 and 39 years of age.

All patients were grouped according to age in the following brackets: 15 to 19 years, 20 to 29 years, 30 to 39 years, 40 to 49 years, 50 to 59 years, 60 to 69 years, and 70 years and over. It was found that the distribution according to age groups, of the patients discharged with advice, was very similar to that of the patients discharged against advice. The percentage alive and well was between 20 and 32 points higher in each age bracket of patients discharged with advice when compared with the similar age bracket of patients discharged against advice.

Age, in itself, then, was not the significant factor in determining the difference in number alive and well found in each type of discharge.

SEX AND RACE

The group discharged with advice was fairly evenly distributed with regard to race and sex. There were 23 per cent male white, 23 per cent female white, 24 per cent male colored, 28 per cent female colored, and 2 per cent male oriental. Except for the male oriental, the same relative distribution was not true of the group discharged against advice. In this group there were 31 per cent male white, only 6 per cent female white, 43 per cent male colored, and 18 per cent female colored. The percentage alive and well, however, remained essentially the same for each category of patients discharged with advice and significantly higher (20 to 30 points) than the corresponding category of patients discharged against advice.

Race and sex, in themselves, did not appear to explain the difference in results between the two groups of discharges.

MARITAL STATUS

Grouped according to marital status, the proportion of patients in each category was remarkably similar for both types of discharges. There were 41 per cent single, 36 per cent married, 7 per cent widowed, 12 per cent separated, and 4 per cent divorced among the discharges with advice as compared to 50 per cent single, 34 per cent married, 2 per cent widowed, 12 per cent separated, and 2 per cent divorced among the discharges without advice.

Again, the percentage alive and well did not change appreciably for each category in each group, and the per cent alive and well for each category discharged with advice was 20 to 30 points higher than the similar category discharged against advice. Marital status, itself, did not explain the difference in percentage alive and well between the two groups of discharges.

DIAGNOSIS

The two groups were also very well matched with regard to diagnosis. Among the patients discharged with advice there were

21 per cent with minimal pulmonary tuberculosis
41 per cent with moderately advanced pulmonary tuberculosis
32 per cent with far advanced pulmonary tuberculosis
2 per cent with extrapulmonary tuberculosis
4 per cent with pleurisy with effusion

In the group discharged against advice, there were

24 per cent with minimal pulmonary tuberculosis
38 per cent with moderately advanced pulmonary tuberculosis
30 per cent with far advanced pulmonary tuberculosis
4 per cent with extrapulmonary tuberculosis
4 per cent with pleurisy with effusion

In both groups the far advanced did not do quite as well as the patients with minimal and moderately advanced disease. Among the medical discharges, 62 per cent of the far advanced were found to be alive and well as compared to 75 per cent of the minimal and 77 per cent of the moderately advanced. Among the discharges against advice, 32.5 per cent of the far advanced were found to be alive and well as compared to 51.5 per cent of the minimal and 42.3 per cent of the moderately advanced. In each category of those discharged medically, the per cent alive and well was again between 20 and 30 points higher than for the similar category of those discharged against advice.

The extrapulmonary groups and the pleural effusions discharged against advice were too small to permit calculation of valid percentages. For those with pleurisy with effusion discharged medically, 96 per cent were alive and well.

It would seem, then, that extent of pulmonary disease, in itself, was not significant in determining the difference in per cent alive and well found between the two groups of discharges.

TREATMENT

The treatment methods considered were bed rest only, or bed rest with collapse therapy, either pneumothorax, pneumoperitoneum, thoracoplasty, or resection. Streptomycin was not considered because it is a relatively recent addition to the treatment of tuberculosis and many of the patients were discharged before the drug came into general use. It is employed as an adjuvant to any one of the treatments considered, and it may be assumed that it was used, in the later discharges, with equal frequency in both groups of discharges.

In the group discharged with consent, 60 per cent had bed rest only, 25 per cent had pneumothorax, 12 per cent had thoracoplasty, 2 per cent had pneumoperitoneum, and 0.5 per cent had resection. In the group discharged against advice, 68 per cent had bed rest, 24 per cent had pneumothorax, 5 per cent had thoracoplasty, 2 per cent had pneumoperitoneum, and 1 per cent had resection. Again, the distribution was very similar.

Of the medical discharges treated by bed rest only, it was found that 71 per cent were alive and well; by pneumothorax 76 per cent were alive and well; by thoracoplasty 69 per cent were alive and well. The group treated by pneumoperitoneum numbered only 11, and 82 per cent were alive and well. Both patients treated by resection were alive and well. Of the discharges against advice, and treated by bed rest only, 46 per cent were alive and well. Of those treated by pneumothorax, 38 per cent were alive and well. There were only 7 patients treated by thoracoplasty, with 57 per cent alive and well; 3 patients treated by pneumoperitoneum, of whom 1 was alive and well; and only 1 treated by resection, who had died.

It would seem, then, that mode of treatment, in itself, did not explain the difference in percentage alive and well between the two groups of discharges.

ONSET

The diagnosis was made either after onset of symptoms leading to X-ray examination of the lungs, or as a result of X-ray examination in the absence of symptoms. The latter occurred in routine X-ray examinations of Government employees or food handlers, X-ray examinations during examination for induction into the Armed Forces, and X-ray examination of contacts to a known case of tuberculosis. Among the patients discharged prior to December 31, 1949 there were only 5 discovered through the 1948 City X-ray Survey.

In the group of patients discharged with advice there were 63 per cent discovered by symptoms, 21 per cent by routine X-ray examination, 7 per cent by preinduction X-ray examination, and 7 per cent by contact X-ray examination. In the group of patients discharged against advice there were 54 per cent discovered by symptoms, 15 per cent by routine X-ray examination, 25 per cent by preinduction X-ray examination, and 5 per cent by contact. The distribution in both groups is fairly close except for the preinduction group. The relative increase of this group among the "against advice" discharges can be explained by the fact that preinduction examinations occurred chiefly during the war years (1943–1945), and it has been shown that discharges against advice were more numerous during this period than in the succeeding years.

Of the patients medically discharged and discovered by symptoms 71 per cent were alive and well, by routine X-ray examination 78 per cent were alive and well, by preinduction X-ray examination 61 per cent were alive and well, and by contact X-ray examination 78 per cent were alive and well.

Of the patients discharged against advice and discovered by symptoms, 43 per cent were alive and well, by routine X-ray examination 47 per cent were alive and well, by preinduction X-ray examination 47 per cent were alive and well, and by contact (a small group of 7 patients) 29 per cent were alive and well.

Apparently mode of onset did not explain the difference in per cent alive and well between the two groups of discharges.

LENGTH OF STAY IN SANATORIUM

Also considered was the length of stay at Gallinger Municipal Hospital or Glenn Dale Sanatorium prior to transfer to this hospital. Once more, the distribution of the two groups of discharges was found to be remarkably similar.

Of the patients discharged with advice

12.0 per cent had a stay of less than 6 months
25.0 per cent had a stay of 6 months to less than 1 year
29.0 per cent had a stay of 1 year and less than 2 years
15.0 per cent had a stay of 2 years and less than 3 years
9.0 per cent had a stay of 3 years and less than 4 years
5.0 per cent had a stay of 4 years and less than 5 years
5.0 per cent had a stay of 5 years and over

Of the patients discharged against advice

18.0 per cent had a stay of less than 6 months
29.0 per cent had a stay of 6 months to less than 1 year
24.0 per cent had a stay of 1 year and less than 2 years
17.0 per cent had a stay of 2 years and less than 3 years
5.0 per cent had a stay of 3 years and less than 4 years
5.0 per cent had a stay of 4 years and less than 5 years
1.0 per cent had a stay of 5 years and over

For each period of stay in the sanatorium, the per cent alive and well for medical discharges was between 20 and 30 points higher than the per cent alive and well for discharges against advice. Thus, length of stay in the sanatorium, or length of time necessary to control the disease, in itself, was not significant in explaining the difference in per cent alive and well between the two groups of discharges.

NUMBER OF PREVIOUS ADMISSIONS

Of the patients discharged with advice 74 per cent had 1 admission to the sanatorium prior to transfer to this hospital, 17 per cent had 2 admissions, 4 per cent had 3 admissions, and 3 per cent had 4 admissions. Of the patients discharged against advice, 68 per cent had 1 admission, 17 per cent had 2 admissions, 9 per cent had 3 admissions, and 4 per cent had 4 admissions.

For patients discharged with advice the number alive and well decreased as the number of previous admissions to the sanatorium increased. Of the patients with 1 previous admission 75 per cent were alive and well, with 2 admissions 67 per cent were alive and well, with 3 admissions 59 per cent were alive and well, and with 4 admissions 50 per cent were alive and well.

For the group discharged against advice this trend is not so apparent. Of patients with 1 admission, there were 42 per cent alive and well, with 2 admissions 50 per cent were alive and well, and with 3 admissions 38 per cent were alive and well. The group with 4 previous sanatorium admissions consists of but 6 patients, of whom 4 were alive and well.

For each group based on the number of previous admissions the per cent alive and well among medical discharges was significantly higher than the per cent alive and well among discharges against advice. Thus, number of previous admissions, in itself, was not the cause of the difference in per cent alive and well between the two groups of discharges.

EDUCATION

Classified as to education prior to illness, the two groups of discharges again showed a fairly similar distribution. For the discharges with advice there were

12.0 per cent with 0 to 3rd grade education
39.0 per cent with 4th to 9th grade education
32.0 per cent with 10th grade through high school
6.0 per cent with some college work or college degree
1.0 per cent with professional training
10.0 per cent with education not stated

For discharges against advice, the distribution was

4.0 per cent with 0 to 3rd grade education
52.0 per cent with 4th to 9th grade education
29.0 per cent with 10th grade through high school
2.0 per cent with some college work or college degree
1.0 per cent with professional training
12.0 per cent with education not stated

Among the medical discharges, the number alive and well at each educational level ranged from 70 per cent to 84 per cent, with 61 per cent alive and well where education was not stated. Among the against advice discharges, some groups were too small to allow calculation of valid percentages. For the 4th to 9th grade group there were 46 per cent alive and well, and for the group for which education was not stated there were 19 per cent alive and well.

It would seem, then, that educational level, in itself, did not explain the difference in percentage of alive and well between the two groups of discharges.

LENGTH OF STAY AT UPSHUR STREET HOSPITAL

With regard to length of stay at this hospital, the distribution cannot be similar, since one group of patients left before rehabilitation was completed. However, among the medical discharges there were some whose stay was shorter than 6 months. They were patients whose physical capacity was judged adequate for their future plans or patients discharged to part-time training or work. At any rate, a comparison of results obtained for equal periods of hospitalization is possible. Of medical discharges, it was found that

41 patients were here for 1 month and less than 3 months, of whom 68 per cent were alive and well

131 patients were here for 3 months and less than 6 months, of whom 71 per cent were alive and well
288 patients were here for 6 months and less than 1 year, of whom 75 per cent were alive and well

In contrast, of discharges against advice, it was found that

51 patients were here for 1 month and less than 3 months, of whom 39 per cent were alive and well
54 patients were here for 3 months and less than 6 months, of whom 45 per cent were alive and well
31 patients were here for 6 months and less than 1 year, of whom 52 per cent were alive and well

The amount of time needed for the rehabilitation procedure to be completed depends upon physical condition, adaptation to and tolerance of the activity program, and nature of the future plans. Undoubtedly, there seems to be a tendency for patients to do better as their stay here increases. The optimum period is between 6 and 12 months. However, when the two groups of discharges are compared with regard to equal stay at the hospital, it is seen that length of stay at this hospital, in itself, does not explain the difference in per cent alive and well found in the two groups.

CONDITION AT DISCHARGE

Since the patients studied were discharged before December 31, 1949, the classification used is in accordance with the 1940 edition of the Diagnostic Standards of the National Tuberculosis Association. Classified by the present Diagnostic Standards (1950 edition) the "apparently arrested" would be termed "arrested," and the "arrested" would be termed "inactive."

Among the medical discharges, 93 per cent were classified as "arrested," whereas of the against advice discharges only 43 per cent were classified as "arrested." However, of the medical discharges with disease "apparently arrested," 61 per cent were found to be alive and well, and with disease "arrested," 73 per cent were found to be alive and well. By contrast, of the "against advice" discharges classed as "apparently arrested" only 36 per cent were alive and well, and of those classed as "arrested" only 56 per cent were alive and well. There can be no doubt that the per cent alive and well increased as the clinical status of discharged patients improved. However, from the above comparison of similar status in both groups, it would seem that clinical condition at discharge, in itself, does not explain the difference in per cent alive and well found in both groups of discharges.

ALCOHOLIC HISTORY

It has long been felt that excessive drinking increased the probability of relapse of the disease. Since the majority of disciplinary discharges were caused either by drinking while at the hospital or by returning from a pass in an intoxicated condition, an attempt was also made to classify the discharged patients according to alcoholic history. The term alcoholic, as used here, refers only to excessive drinking to the point of inebriation.

Patients were divided into three groups as follows: (1) patients with an alcoholic history that was known, usually judged by behavior at the hospital, (2) patients with an alcoholic history that was suspected, usually judged by past behavior before admission to the hospital, and (3) patients with an unknown alcoholic history. The latter group includes those who never drank, those who drank moderately and not enough to arouse the suspicion of the staff, and perhaps a few unknown heavy drinkers who were abstaining during their hospitalization.

Of the patients discharged with advice there were only 5 with a known history and 3 with a suspected alcoholic history. The rest (99 per cent) were classified as of unknown alcoholic habit, and 73 per cent of these were alive and well.

Of the patients discharged against advice and with a known alcoholic history, 38 per cent were alive and well; with a suspected alcoholic history, 35 per cent were alive and well; and with an unknown alcoholic history, 47 per cent were alive and well. Patients with a known or suspected alcoholic history did not do as well as the average for the entire group (44 per cent were alive and well). The majority (71 per cent) of the discharges against advice were in the unknown group, and only 47 per cent of these were alive and well as compared to 73 per cent alive and well for the unknown group among medical discharges. Excessive drinking does tend to increase the probability of relapse, but in itself it does not completely explain the difference in per cent alive and well between the two groups of discharges.

STATUS AT DISCHARGE

Of the patients discharged with advice there had been

158, or 32.0 per cent, discharged to full-time work, of whom 69.0 per cent were still alive and well

90, or 18.0 per cent, discharged to part-time work, of whom 76.0 per cent were still alive and well

26, or 5.0 per cent, discharged ready for full-time work, of whom 69.0 per cent were still alive and well

15, or 3.0 per cent, discharged ready for part-time work, of whom 80.0 per cent were still alive and well

29, or 6.0 per cent, discharged to continue school, of whom 72.0 per cent were still alive and well

43, or 8.0 per cent, discharged to vocational training, of whom 77.0 per cent were still alive and well

74, or 15.0 per cent, discharged as housewives, of whom 84.0 per cent were still alive and well

53, or 10.0 per cent, discharged as not seeking employment, of whom 61.0 per cent were still alive and well

17, or 3.0 per cent, discharged as unemployable, of whom 65.0 per cent were still alive and well

Of the patients discharged against advice, 80, or 59 per cent, were discharged before vocational plans could be started, and of these only 37 per cent are alive and well. There were a few patients discharged in each of the other categories, but their number is too small to allow computation of valid percentages. However, with but 2 exceptions these tentative percentages were all well over the average for the entire group (44 per cent). The largest of these groups consisted of 29 patients, or 21 per cent, discharged to continue part-time employment, and of these 62 per cent are alive and well.

It would seem that although the group discharged against advice did not do as well as the group discharged with consent, those patients who had started their vocational rehabilitation did definitely better than those discharged before vocational plans could be made. It might be objected that the former had a longer stay at this hospital and that this might be the factor deciding their present status. These patients did have a longer average stay; 21 per cent were here from 1 to less than 3 months, 48 per cent were here from 3 to less than 6 months, and 31 per cent were here from 6 to less than 12 months. Of patients discharged before vocational plans were started, 50 per cent were here from 1 to less than 3 months, 33 per cent were here from 3 to less than 6 months, and 17 per cent were here from 6 to less than 12 months.

However, it has previously been shown that length of stay at this hospital, in itself, did not explain the different results obtained in both groups of discharges. Furthermore, considering the patients discharged against advice before plans were started, of those who were here from 1 to less than 3 months, 35 per cent are alive and well; of those who were here 3 to less than 6 months, 38 per cent are alive and well; and of those who were here 6 to less than 12 months, only 31 per cent are alive and well.

The value of vocational rehabilitation can be demonstrated in another way. Of the 505 patients discharged with advice, 272, or 55 per cent, had started outside activity, and of these 71.4 per cent were alive and well. The other 232 patients had no outside activity, either because no part-time employment was available or no employment or training was indicated, and of these 73.7 per cent are alive and well. The per cent alive and well is essentially the same. All of these patients were discharged when it was felt that their capacity was adequate for their future plans.

Of the 136 patients discharged against advice, 97, or 71 per cent, had no outside training or part-time employment and of these only 37 per cent are alive and well. By contrast, 39, or 29 per cent, of the "against advice" discharges had started outside activity prior to discharge, and of these 61.5 per cent were alive and well. Patients who had started vocational rehabilitation did appreciably better than patients who left before such plans were made, irrespective of length of stay at this hospital.

COMMENT

A correct evaluation of a rehabilitation program necessitates the comparison of two groups of patients, equal in all respects except that one group shall have had rehabilitation and the other shall have been discharged without benefit of rehabilitation. Moreover, because of increasing knowledge and refinement of treatment technics, both groups should have been discharged during the same period of time. To meet such criteria is very difficult. In the present instance it was impossible. It was found necessary to compare a group discharged medically with a group discharged against advice. Under ordinary circumstances, such a procedure would be illogical and any conclusions drawn would be invalid. However, the patients admitted to Upshur Street Hospital are selected in one respect. They are the more coöperative patients treated at Gallinger Municipal Hospital and Glenn Dale Sanatorium, as the non-coöperative patients either walk out or are discharged before they are ready for transfer to this hospital. The control group used in this study, therefore, is not comparable to the usual discharge against advice from a sanatorium treating patients with active disease. Our patients had accepted the purely medical and surgical treatment of the disease but refused the rehabilitation necessary to consolidate and maintain the benefits of treatment.

It was also shown that our group discharged against advice was comparable to the group discharged medically with regard to age, marital status, diagnosis, treatment, onset of illness, length of hospitalization prior to transfer here, number of previous admissions to the sanatorium, and education. Since they were comparable in these respects, then these factors, in themselves, cannot explain the difference in results between the two groups. Furthermore, although not strictly comparable with regard to race and sex, length of stay at this hospital, clinical condition at discharge, and alcoholic history, these factors, in themselves, also do not explain the difference in results found between the two groups of discharges.

CONCLUSION

The one factor in which the two groups differed completely was that of status at discharge. The patients discharged with advice had completed the activity program at the hospital; had demonstrated adequate physical capacity for their future plans; and, wherever outside employment was necessary, had vocational guidance and selective placement in employment. The patients discharged against advice had left the hospital before their physical capacity was fully developed and evaluated, and before vocational plans were completed. In this latter group, it was found that those patients who had at least started on their vocational plans did significantly better than those patients who had not started vocational plans. It would seem, then, that the difference found between the two groups in percentage alive and well could be explained by the fact that the patients discharged with advice had completed the hospital program of rehabilitation and that the patients discharged against advice had not completed such a program.

The aim of rehabilitation of the tuberculous is to bridge the gap between the sanatorium and the community and to effect the gradual transfer

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INDUSTRIAL PRODUCTION AND THE PHYSICIAN*

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AMERICA'S vast industrial production geared to high speed is the democratic world's first line of defense against the forces of Communism. Back of this almost unbelievable mechanized force stand the workers of America's industrial army. Men without machines can always be useful, but machines without men remain inanimate and useless assemblies of metal. Mechanization, however, has created more jobs for more men and women resulting in a staggering output of products of all kinds, instruments of peace as well as the terrifying weapons of war.

Into this picture, during peace and war, the physician is blended as an integral part, since machines need men and women—men and women of sound mind and body. The challenge of keeping America healthy faces all men of medicine today, for our way of life depends upon the maintenance of a healthy civilian working force backing up a strong, healthy and fully equipped armed force. In a world of this kind more men and women are geared to high speed, and under the existing pressures and tensions we find an increasing number showing evidence of fatigue, particularly "nervous fatigue." Beset with anxieties, depressions, irritabilities, outbursts of temper and petty annoyances, the patient presents himself to his physician with many and sundry complaints. The busy physician, too often because of lack of time and faced with many of these problems, writes a prescription for phenobarbital and says, "Get away from the job for a month." Too often this is like running wildly and aimlessly through a forest with flames of fire licking at your heels; the fire burns faster than you are running and you are consumed. You can't run away from a fire that is consuming the soul and mind—face it, stomp on it, blanket it, wet it, put it out!

It behooves the physician to clearly differentiate between the organic and functional, since the pitfalls of labeling as "neurotic" the sufferer from marked organic disease are well known to all of us. A carefully obtained history, laying emphasis on the past and family history, habits, occupational and domestic information, as well as the story of the present illness, is the backbone of any diagnostic approach. Perhaps the most neglected feature of the history has been the occupational feature. It is not sufficient to know where a man works and his job title, but we should also know what he does, the hazards of his job, his hours of work, and his attitude toward his job, his supervisor and his fellow worker. We should know how long he travels to and from work and how he travels. We should not be content with knowing how many meals he eats, but also know what he eats. His home life should be probed. His recreational activities should be defined and even his philosophies unfolded.

All of this is time-consuming and offers a very real problem to the busy practitioner. Without a well-grounded knowledge of all of these things, however, it is grossly unsatisfactory to pass it over and write a prescription for a sedative and advise time away from the job. The patient honestly feels, in most cases, that the job makes him nervous, but more often than not the underlying factor is found in off-the-job situations. Taking such an employee off the job does not take him away from his troubles. It often leaves him in the middle of them, where he stews and frets and becomes even more nervous. If he is advised to get away from home, job and city into a new environment for 2, 4 or 6 weeks he often adds an additional financial burden to the one he may already be carrying. He leaves behind all intimates with whom he might talk. He is away from you, his physician, whom he needs as a guide and counsellor. As a result, his anxieties frequently increase, he becomes lonely and depressed, and at times he becomes an easy prey for charlatans and quacks. My plea is to keep these people on the job whenever humanly possible, to keep them under your supervision and guide them carefully back to normal attitudes, reactions and understanding. The general practitioner with his always deep background knowledge of the family as a whole is peculiarly well equipped to guide these patients if he will avoid the sedative, "take a leave" pitfall.

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There is another consideration apparently often misunderstood by the private physician through no fault of his own, and that is the fact that many workers qualify for sickness disability benefits under various and sundry plans. There are over 7,500,000 workers in this country receiving benefits through health and welfare plans, established either by industry or by means of collective bargaining between management and labor.[1] Medical care under these plans varies greatly. I do not believe that such plans are really working on an equitable basis when the worker with pneumonia is treated promptly with antibiotics, recovers promptly, and returns more quickly to his job than ever before, while his fellow worker, alleging that his job makes him nervous, gets a sick slip from his physician advising a prolonged absence for which he is going to be paid. An absent employee's work must be done by a substitute or divided among his fellow workers. This increases the cost of production in the first instance and increases the work load of other workers in the latter instance.

A sickness certificate signed by a reputable physician recently crossed my desk with this note: "Mrs. ——— has become increasingly nervous because she is doing two jobs—her job at the Company 8 hours a day and all of her housework, plus helping on the farm, milking the cows, etc. It is too much for her. I have advised her to be away from her job with the Company for 6 months." That physician unthinkingly was asking the Company to finance his patient for 6 months while she did a full day's work at home. In addition the Company would have the salary of her replacement for 6 months. Who foots this bill? In the final analysis it is you who buy the Company's service. To give this woman a 6 months' leave of absence without pay is one thing; to give her sick leave with pay is quite another. I am sure that this physician made his recommendation in good faith and in the best interest of his patient, but he should have inquired of her with respect to the Company's sickness plan. Every industry cannot expect every physician to know the details of its plan, but every employee can tell his physician if asked about it.

Another sickness certificate reads: "Diagnosis: Nervous exhaustion. Return to duty: Indefinite." Management's planning of its work operations is made difficult when it does not even have an estimate of absent time. The problem is pinpointed a bit more clearly when I tell you that a work force of 290 to 300 operators over and above the normal 24-hour complement must be maintained in one of our large metropolitan centers in order to compensate for absences of all kind and to insure the public the service it is entitled to and has come to expect.

Common "catch-basket diagnoses" are "low blood pressure" or "anemia" or both—these in the face of demonstrated blood pressures within normal limits and hemograms within normal levels. These are satisfactory diagnoses when the conditions actually exist, but they are not satisfactory if they are simply masks for "no diagnosis made" or absence due primarily to emotional upheavals.

I am completely in sympathy and fully aware of the problems facing the personal physician and his primary responsibility to his patient. I would not disturb this fundamental relationship. I decry the abuse of confidential information. However, I honestly believe that the patient's ultimate welfare demands that his physician be honest with himself, his patient, and his patient's employer. A simple, honest, well meant suggestion by the physician to his patient that it would help if he could get away for a few weeks' vacation is frequently presented by the patient to his employer as a prescription for sick leave with pay. I know that this is not the physician's intention, but once this situation has developed it may lead to unnecessary embarrassment to all. It is difficult for the physician to say then to his patient, "I didn't know you were to be paid for your absence or I would not have suggested it," and in the face of his suggestion to the patient it is difficult for the employer to say, "We don't agree with your doctor; you can take a vacation or leave without pay but you can't take sick leave." Physician-patient relationships and employer-employee relationships are vitally disturbed by such situations, and the industrial physician often finds himself in a position in which it is difficult for him to be sure he is acting in good faith with all parties concerned in his recommendation to the management of the business.

I trust that I do not appear critical in illustrating these problems. I do not mean to be; I am only hopeful that in presenting them the problem as related to all of us will be brought into clearer focus. I believe that there is an answer to the situation and that it lies in a closer relationship between the personal physician and the industrial physician. I daily seek the counsel, advice and assistance of you men in private practice with respect to the health problems of your patients, our employees. Certainly, the industrial physician is always available to you for discussion of problems relating to your patient's absence, for discussion of job placement and job modification, and for any help we can give through the facilities of our medical departments, our visiting nurse services, company sickness and benefit plans and pension plans, and a frank interchange of information and ideas that is designed to do what is best for the patient in relation to his illness, his job, his home and his rightful place in the community.

I would urge you to give us the opportunity to work with you in the interest of your patient. His care is your fundamental responsibility, and I offer our assistance, not as an intruder, but in the spirit of coöperation which characterizes the relationships between physicians. To keep America's workers strong and healthy I offer this approach as one facet of the problem.

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THE OVERWEIGHT EXECUTIVE—PROBLEMS AND PROGRAMS*

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WE ARE aware from morbidity and mortality statistics kept by insurance companies for many years that obesity shortens life and affects the health of persons over 40 years of age. The executive with 10, 20, or 30 years of experience usually falls into this age group. If his life or usefulness is curtailed by obesity, followed subsequently by degenerative disease, industry loses a large investment in training and experience and an employee who, unlike other employees, is not easily replaced.

Progressive industry in its health maintenance programs gives full recognition to the importance of the problem of obesity among key personnel. Our executive health program was not established with the idea that we were dealing with a group made up of ill and disabled persons. Rather, we planned the program on the basis that the executive, like other employees, should be maintained in good health through early detection of symptoms and by counseling for control of defects and improvement of health. Under this program we are able to refer the executive to his private physician, in many instances before irreparable damage has been done to his health.

On an industry-wide basis, anywhere from 10 to 30 per cent of executive and key personnel are found to be 10 per cent above their ideal weight. In a recent review of over 6,000 periodic physical examinations in our company, we found overweight among 23 per cent of the nonexecutives and among 25 per cent of the executives. The incidence of degenerative disease (including hypertension, diabetes, and abnormal electrocardiographic findings) among overweight persons in both groups was about equal. The incidence of heart disease, diabetes, and hypertension was greater in both groups than among those employees of average weight or underweight. We may be too prone, therefore, to picture the average executive as a gouty, corpulent, "fat cat" individual in a derby hat, whose chances of living to a ripe old age are much less than the popular conception of the "lean," "hungry" workman in overalls. Because of many socioeconomic changes, including improved living standards, better working conditions, and more leisure time, the average nonexecutive or workman may be just as apt to "dig his grave with his teeth" as the executive.

I point out the above comparisons so that we may not be guided too much by statistically average prototypes of one job class as against another. I fear that if we are guided by prototypes we may lose sight of the essence of the problem in real people. It is the real people that count and not the statistics, the height and weight tables, or the systematized knowledge of body metabolism and chemistry. Accepted norms or criteria in treatment often fail for lack of understanding of real people and their problems, whether it be overweight or colitis.

Our success with this problem can be measured in the degree to which we have stressed the importance of individual differences among people, psychologic as well as anthropologic. Individual metabolic patterns show a wide range of variation. The high protein, low fat diet, though very effective in many cases, is of little use in others. We have found no panacea or magic formula in reducing weight of either executive or nonexecutive. Individual differences will determine whether we pattern a weight reduction régime on a qualitative or quantitative basis. Any routine distribution of standard printed diet material is not advisable. Medications to reduce appetite have proven effective in some cases in which it was evident that excessive eating was due to boredom or depression. These medications generally are not well tolerated and are contraindicated in many cases because of hypertension.

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Our greatest problem is to penetrate zone no. 1 of resistance and "sell" the executive on the idea that he may be shortening his life or period of usefulness with his eating habits. This may be difficult unless he has had some definite warning or early symptoms of a degenerative disease. Once, however, he has been "tapped on the shoulder by the Grim Reaper" he is very receptive to a weight reduction program or any other measures to improve his general health.

Motivations in overeating are similar among all employees and have the same psychogenic aspects of self-approval, seeking of appreciation, and escape from boredom. As frequently, however, the pattern is the normal psychic reaction to the sight or smell of good food well prepared. The appeal to the executive for the reduction of food intake is much more sympathetically received by his wife than by the wife of the average workman. It is more difficult for the wife of a workman to adjust the dietary pattern at home than it is for the executive's wife. Sometimes the wife of a workman will take the appeal for weight reduction of her husband as a reflection on the quality of her cooking. One irate spouse called us and asked, "How dare you accuse me of ruining my husband's health with my cooking?" The executive's wife, on the other hand, more often may be dieting herself and be very sympathetic to her husband's problem.

The executive may "soft soap" himself with respect to his overweight. Often he is expert in rationalizing his problem and may give the physician very convincing arguments justifying his appetite and his weight. Some get short of breath and irregular heart action in telling the physician that their weight is "all in the family," "normal for them," and that they "eat like a bird." On careful questioning, however, it is obvious that their idea of a bird's appetite would do justice to a condor.

Now, an executive usually is a man of superior ability and accomplishment and shoulders considerable responsibility which he carries in accordance with his capacities or ability. If he is subject to nervous tensions, with feelings of frustration and suppressed hostility at an occupational or domestic level, he may find food, in nibbles or at a banquet, a very pleasant relief from nervous tension. Thereby he adds more weight which inwardly may become an additional disturbing factor. Worrying about the weight increase brings on more nervous tension which calls for another snack, and the whole situation becomes an endless circle. He needs an individualized approach, not initially by charts, graphs, or diet sheets, but by sympathetic questioning regarding his emotional problems connected with his work or with his life away from work. We must question him regarding his job interest; i.e., does he like what he is doing? Are his ability and accomplishments appreciated by management? We ask him about his home life; i.e., is his wife a good cook? Is his home life happy?

Some idea should be obtained with regard to the executive's social obligations which might require attending dinners, cocktail parties, banquets, and other activities which make dieting difficult. A good insight into his recreational activities is important. The average executive is receptive to the idea of regular physical exercise in the form of golf and other sports.

After we feel we understand his stresses and patterns of life on and off the job, we are then ready for definitive treatment. Whether we select a simple qualitative dietary restriction or a quantitative procedure, the responsibility for weight reduction should be placed wholly and squarely with the patient. The physician's role is to educate and guide the overweight individual. His role should not be a defensive one, but rather one of keeping the patient on the defensive in persisting with the weight-reducing program.

Relapses to former eating habits are frequent even under the most optimum conditions of treatment. Only a minority of executives persist with weight-reduction programs over a long period of time. Most of the minority is made up of individuals who have had some definite symptoms of early or advanced chronic, degenerative disease. A good percentage of relapses can be prevented by having the executive plot his weight curve from week to week, and then by having him report on a monthly basis to the Medical Department for "weighing in."

Health education on this subject, in various forms, has been tried on a "hit and miss" basis in industry, with poor success. To date, articles in industrial publications have been too general, and other media for health education fail for lack of penetration of zone no. 1 of the average individual. One industrial concern has had some success in its program by issuing cards to overweight executives listing them as bona fide members of a "fat men's club." These are involuntary memberships, of course, and the members can resign only after proof of having reduced their weight to average and having kept it average for a year.

Group psychotherapy with the obese, similar in principle to the "Alcoholics Anonymous" approach, has recently shown some interesting results. One investigator reports that group psychotherapy experience proved to be effective in maintenance of weight loss in close to 50 per cent of patients who did not succeed by other methods. He adds, however, that there was no remarkable over-all weight loss in this group of patients. The distinguished biochemist, R. J. Williams, has propounded a revolutionary concept of alcoholism based on nutrition. Results in group psychotherapy of the obese should show some significant correlations with results of group psychotherapy in chronic alcoholism, and furnish us with clearer concepts of individual integration problems in modern society. In any event, the idea of group psychotherapy in overweight and obesity should be evaluated further among executives and other employees in industry.

A great deal of confusion exists inside and outside of the medical profession on methods of weight reduction, metabolism, and in the field of nutrition generally. A large segment of the public, especially here in California, is being attracted to costly dietary and vitamin fads and fetishes which have been spawned in the vacuum created by the dearth of clinical research along nutritional lines.

More clinical research in nutrition is needed. If this research can be stimulated to the same degree as in cancer or poliomyelitis, possibly our whole concept of disease, organic, functional, or mental, may be radically changed. Today we are dealing with what we consider numerous separate disease entities which tomorrow may prove to be different manifestations of a few basic chemopathologic states. We may speak more and more of disease profiles based on body chemistry. In the future our ideas of hereditary factors in both overweight and disease may attach more importance to dietary patterns in nationalities, races, and families than to the influences of genes and chromosomes.

Our topic this afternoon is the overweight executive, but I believe we are considering a problem much greater in scope than the relationship of weight to disease. If by considering overweight or obesity we develop a greater understanding of people with their individual requirements, emotional as well as nutritional, we as physicians will have accomplished much in the field of human relations.

NONSPECIFIC MYOCARDITIS

Report of Two Proved and One Probable Case

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BY DEFINITION, nonspecific myocarditis implies inflammatory involvement of the myocardium of undetermined etiology. It is a form of nonvalvular heart disease not caused by rheumatic fever, coronary artery disease, hypertension, syphilis, diphtheria, obvious metabolic disorder, vitamin deficiency, or as an incidental and transitory phenomenon complicating the course of an infectious illness such as pneumonia, typhoid fever, typhus, streptococcus sore throat, etc.[1] Studies of nonspecific myocarditis have thus far uniformly failed to reveal a constant or convincing etiologic agent, as witness the array of terms used to describe what appears to be the same disease: acute isolated myocarditis, diffuse nonspecific myocarditis, idiopathic or cryptogenic myocarditis, virus myocarditis, and Fiedler's myocarditis, the last so "eponymed" after its original description by Fiedler in 1899. By and large the names bequeathed this condition suggest its general nature, i.e., isolated myocarditis because of limitation of demonstrable primary pathologic changes to the myocardium, without involvement of endocardium, pericardium, or other more remote organs and tissues; diffuse nonspecific myocarditis because the heart muscle lesion is diffuse and not localized as occurs often in myocardial infarction, aneurysm, etc.; idiopathic or cryptogenic because the inciting agent is unknown; virus myocarditis by those who infer a virus etiology; and Fiedler's myocarditis by persons who are intrigued by eponyms or who wish to immortalize the name of the original discoverer. Regardless of terminology, however, review of the literature reveals increasing incidence and/or recognition of a disease that multiplying reports show produces a pattern which in its clinical picture, course and pathology is as characteristic as many conditions universally accepted as clinical entities. Analysis and organization of the findings of a number of reports may be of value in leading to earlier and more frequent recognition of this disease and so promote better understanding of its nature and treatment, and ultimately reveal that all-important feature, the cause.

Etiologic factors or agents of diverse nature have been suspected or incriminated by various workers. Scott and Saphir[2] collected 30 cases in 1929 and added 2 of their own; suspected causes included gonorrheal urethritis, carbuncles, syphilis, upper respiratory infections, "flu," hyperthyroidism, "rheumatism," and status thymicolymphaticus. Magner[3] reported a fatal case in 1939 of subacute myocarditis following subtotal thyroidectomy and with presumably inactive tuberculosis. He does not regard the disease as a clinical entity and believes atypical tuberculosis, syphilis, rheumatic fever, or "other unknown inflammatory conditions of variable causation" to be responsible. Kauffman, quoted by Scott and Saphir, suggests the myocardial changes may be due to the toxic action of bacterial products rather than to the actual organisms per se. Smith and Furth[4] in 1943 reported 5 cases of endocardial and myocardial fibrosis, and postulated dietary deficiency as an underlying cause. Their cases leave something to be desired as to either proving a significant deficiency or, assuming its presence, relating it to the clinical course and pathology. No response was obtained by presumably adequate correction of the deficiency, and the hearts displayed much more endocardial than myocardial involvement at necropsy, which raises the question whether they should be included in this group at all. Ten years ago Reisinger and Blumenthal[5] reported 5 cases of myocardial degeneration with hypertrophy, 4 with luetic histories. They considered and discussed syphilis as a possible cause of the cardiac lesion.

Schmidt[6] in 1948 studied the tissues from 1 gibbon and 2 chimpanzees dying suddenly from intense interstitial myocarditis. They recovered from 2 of these animals a virus which killed several generations of mice and hamsters as a result of inflammation of the central nervous system and heart. Guinea pigs showed similar changes but survived longer, and rabbits were markedly less susceptible to the agent. Smadel and Warren[7] have isolated a virus which produces lesions of the brain and myocardium (encephalomyocarditis) in rodents and monkeys. Sera from humans recovered from rheumatic fever, idiopathic myocarditis, encephalitis and aseptic meningitis were all negative in tests with this material, whereas 17 of 44 cases of so-called "3-day fever" occurring in Manila during World War II gave positive results with the EMC virus. Three-day fever was characterized by chills, fever, headache, stiff neck and pleocytosis in the spinal fluid. Since all patients survived, no pathologic material from human hearts was available for study. The type of change evident in animals, however, suggests viral etiology in the nonspecific myocarditis under discussion. A 24-year-old white male student, reported by Covey,[8] died 1 week after the onset of a "cold." Autopsy disclosed myocarditis with mural thrombi and embolic phenomena as well as what appeared to be virus changes in the lungs and central nervous system. Antecedent influenza was suspected in this case. Two years later, in 1944, Coulter and Marcuse[9] reported the case of a 14-year-old colored boy who died suddenly with findings similar to those in Covey's case and a history of 2 recent attacks of "flu." Several of Scott and Saphir's series of cases of myocarditis occurred during or after bouts of influenza. G. H. Hansmann and J. R. Schenken[10] recorded the 1-week fatal illness of a 48-year-old colored housewife coming on after an upper respiratory infection and "grippe-like" attack, in which necropsy showed the usual pathologic features of acute isolated myocarditis. Mallory and associates[11] discussed a case in the Massachusetts General clinicopathologic exercises in 1946 in which influenza was considered possibly responsible for death due to severe myocarditis. Maxwell Finland and associates[12] in 1945 reported 2 cases of extensive myocardial changes of the Fiedler's type, from the lungs of which they isolated and identified the influenza A virus. More recently Borden[13] observed the course of an illness in a 29-year-old laborer which justified a diagnosis of acute isolated myocarditis. The sera yielded rising antibodies for influenza A virus in significant amounts. The man recovered.

The number of cases with histories of influenza, "grippe," etc. prior to the development of cardiovascular symptoms, the repeated suspicion of "flu" as a causative factor, and these more recent experimental laboratory and clinical serologic studies lend strength to the theory that a virus may eventually be identified as the etiologic agent in nonspecific myocarditis. For the present, intensive study of such cases antemortem, provided by earlier diagnosis, is the only method that can be expected to yield a definitive answer to this half-century problem. Not until then will more effective treatment become available to alter the course and improve the prognosis.

Pathologically, patients who die of nonspecific myocarditis almost invariably exhibit cardiac hypertrophy and dilatation.[14] Mural thrombus formation in one or more of the cavities of the heart is the rule, with the expected embolic and infarction phenomena consequent to this condition commonly found chiefly in the lungs, kidneys, spleen and brain; other viscera and the extremities are less frequently involved.[15] Hydrothorax and ascites occur in almost half the reported cases.[1, 2, 15-18] Abnormalities of the endocardium and pericardium are rarely demonstrated; when present, some authors automatically exclude the cases as "isolated myocarditis." Organ changes incident to congestive heart failure are naturally present in most cases but are considered effects rather than integral features of the primary pathologic process.

Microscopically the myocardium exhibits hypertrophy and swelling of muscle fibers, loss of cross-striations, segmentation and disintegration, degeneration, fibrosis, and interstitial infiltration by lymphocytes, mononuclears, polymorphonuclears, eosinophils and occasional plasma cells.[3, 10, 11, 14, 16, 19, 20, 21] Changes are characteristically diffuse, causing thinning and weakening of the muscle structure despite the gross hypertrophy. Actual necrosis is not uncommon, although usually spotty in distribution. Minute hemorrhagic areas may be present.

The pathologic physiology of the disease is written in the anatomic changes seen at autopsy. A battered and weakened myocardium is incapable of sustaining adequate circulation in the vascular system, leading to irreversible congestive failure, which in many cases is augmented by impaired respiratory function secondary to multiple and repeated pulmonary infarctions. Progressive cardiac insufficiency develops, leading to death within a period of a few days to 2 years from the onset of symptoms. In view of the nature of the disease process, it is small wonder that therapy is so uniformly ineffective, accomplishing little in many instances even toward delaying the inexorable march to the grave.

Review of the clinical course of reported cases by various authors[2, 3, 8-14, 16-24] develops a characteristic pattern that should lead to earlier and more accurate diagnosis at the bedside. The picture is not as kaleidoscopic as considered by many, but presents as reasonably consistent features as other conditions unquestionably accepted by all as clinical entities. Nonspecific myocarditis is no more fixed in its evolution than is myocardial infarction, peptic ulcer, pancreatic cancer, syphilis or tuberculosis, and we freely and often diagnose these conditions antemortem without reservation. Why, then, is there such reluctance on the part of so many physicians to make the diagnosis of isolated or nonspecific myocarditis in the absence of absolute proof, which is often lacking in these other conditions?

In the collected series there is no significant sex or racial distribution, although in the reported cases males do predominate. The age range is quite striking. The vast majority of patients are between 20 and 50 years of age; a few cases occur in childhood and some in elderly persons. Occupation, environment and geography appear to exert no influence on incidence. The habits of the patients were not recorded. The striking manifestations in humans are progressive myocardial weakness, with dyspnea, precordial pain, tachycardia, cyanosis, normal or low blood pressure, and cardiac enlargement. A temperature elevation above 99.5°F. to 100°F. is unusual, although sweats are frequently present, and nausea with occasional vomiting may occur. Leukocytosis is variable; more often than not the white blood cell count is within normal limits in the absence of complications. The sedimentation rate also is frequently normal, which, when present, may assist in the differential diagnosis between myocarditis and coronary occlusion or rheumatic carditis. Other laboratory examinations yield little useful information except X-ray films and the electrocardiogram. X-ray films of the chest usually demonstrate the cardiac hypertrophy or dilatation and may disclose evidence of pulmonary emboli, a very common finding. Electrocardiograms are likewise abnormal, although they do not exhibit a diagnostic pattern. T-wave inversion, tachycardia, various arrhythmias, and conduction disturbances of all kinds may occur, as might be inferred from reflection on the myocardial histopathology. Gallop rhythm is a common auscultatory observation, whereas murmurs are absent in most cases. Failure to respond to adequate digitalization is so uniformly present that slowing of the pulse rate and restoration of compensation with digitalization alone throws doubt on the diagnosis. Symptoms and signs due to extracardiac involvement need not be detailed here, except to emphasize again the frequent occurrence of embolic episodes, which often occur early in the course of the disease, so that sometimes the presence of myocarditis is signaled by a sudden paralysis, pulmonary infarct, or serous effusion. The break in cardiac efficiency is usually rapid; apparently the pathologic changes develop to a certain point, then decompensation occurs. This view is strengthened by postmortem observations in which the lesions found obviously antedated by far the onset of the terminal illness.

In summary then, the rather sudden onset of congestive heart failure in a young adult, with tachycardia, gallop rhythm, cardiomegaly, nonspecific electrocardiographic changes, which fails to respond to the usual therapy should suggest the possibility of isolated myocarditis. Embolic phenomena, serous effusion and a normal sedimentation rate, if present, will fortify this impression, and the absence of stigmata of rheumatic fever, hyperthyroidism, myocardial infarction or endocarditis should encourage the presumptive diagnosis of nonspecific myocarditis.

The course is almost invariably progressively downhill despite all measures, and the patient dies from overwhelming congestive failure, or as a result of an embolic insult.

Treatment is unavailing. Obviously diet, digitalis, diuretics, sodium restriction, cation exchange resins and paracentesis are employed to full advantage. Oxygen and quinidine may be indicated in certain emergencies. Anticoagulants theoretically might ward off an infarction here or there, though this point is debatable, since even the most enthusiastic advocate of such therapy does not claim the liquefaction of intracardiac mural thrombi which are so often present in this disease. Cortisone has been used in 3 cases. All of these patients exhibited almost dramatic response initially. One patient died 2 weeks later after having recovered from a cortisone-induced psychosis; 1 relapsed and died following a brief remission; the third is still in remission at this writing, and the final result is not yet clear. The exhibition of cortisone to subjects in congestive failure, in view of the hormone's known electrolytic and pressor effects, is in itself a hazardous undertaking, so that careful evaluation and deliberation are imperative when its use is considered. The growing impression that idiopathic myocarditis may be of viral etiology, together with the known effectiveness of agents such as aureomycin, chloromycetin and terramycin against primary atypical pneumonia, rickettsial disease and the like, suggests a tempting therapeutic approach so far unexplored (although one of my patients was on terramycin for several weeks without apparent benefit).

REPORT OF CASES

Case 1. A 36-year-old married white woman was seen in January, 1950, 3 months following a complicated labor which produced a stillborn infant. She had experienced persistent weakness until 1 month postpartum, when she developed dyspnea and tachycardia. An electrocardiogram at that time revealed the heart rate to be 130 and inverted T waves in Leads I, II, and $V_{4,\ 5,}$ and $_6$. Left pleural effusion was demonstrated in X-ray films. Rest, diet, diuretics and digitalis effected temporary improvement except for tachycardia; then dyspnea, fever, nausea, vomiting and malaise appeared. Six days' use of penicillin abated these symptoms, although the electrocardiogram remained unchanged. Recurrence developed within 2 weeks, with the addition of hepatomegaly. At this time the patient was pale and dyspneic with a pulse rate of 120, a blood pressure of 92/70, cardiomegaly, gallop rhythm and hepatomegaly. Physical findings and fluoroscopy suggested pericardial effusion; 2 attempted pericardial taps yielded 15 c.c. of bacteriologically sterile bloody fluid. Laboratory data revealed persistent leukocytosis, normal sedimentation rate and urinalysis. Blood cultures were negative, and all other blood studies showed no abnormalities. Sweats, nausea and vomiting, dyspnea, tachycardia, and low-grade fever marked the course for several weeks. Then the symptoms and signs cleared up except for tachycardia, gallop rhythm and an abnormal electrocardiogram. Special studies including tests for febrile and cold agglutinations, antistreptolysin titers and viruses were negative.

During March and April the patient hovered in borderline compensation, then lapsed into congestive failure again. Hospitalization once more effected temporary improvement, although digitalis, quinidine, salicylates, concentrated vitamin B complex and terramycin trials were all ineffectual in reducing the heart rate, the heart size, the gallop rhythm, and the periodic dyspnea. A pericardial tap repeated on June 26 yielded findings identical with that done 6 months previously. From this time she pursued a slow but relentless downhill course. Her refractory decompensation was thought possibly due to pericardial disease, and eventually she was readmitted for exploratory pericardiostomy. Biopsy of a maculopapular skin lesion on this admission was reported as "consistent with lupus erythematosus"; a bone marrow examination was negative for L.E. cells. The patient was then critically ill, with the temperature over 102°F., the pulse rate 160, and the respiratory rate 40 per minute. Surgery was abandoned and cortisone initiated. Within 18 hours the temperature, pulse rate and respirations were normal, and gallop rhythm was absent for the first time. During this 48-hour period pulmonary and right femoral embolization occurred but was controlled by vigorous treatment. After 7 to 10 days of cortisone the patient's condition appeared better than in some time, although tachycardia and gallop rhythm recurred. A few days later the patient became psychotic (paranoid and catatonic), and cortisone was stopped. The cardiac status was then relatively satisfactory, and attention was directed to the mental disturbance. The psychosis appeared almost gone in 8 days, when the patient suddenly sat up in bed, uttered a cry and fell back dead. Autopsy showed cardiac hypertrophy and dilatation, mural thrombi, bilateral pulmonary embolism with infarction and pleural effusion, pericardial effusion, ascites, chronic passive congestion of the lungs, liver and spleen, and fibrosis of the myocardium. Microscopically, the parietal pericardium was slightly thickened and fibrotic. A mild perivascular infiltration of lymphocytes was present. The visceral pericardium was essentially negative. Scattered throughout the myocardium were small foci of fibrosis. These foci were rather cellular, and some of them were quite vascular, suggesting fairly recent development. Scattered macrophages filled with granules of hemosiderin were found in these areas. A mild lymphocytic and plasma-cell infiltration was also noted, particularly in perivascular areas and at the periphery of the lesions. The myocardial fibers elsewhere were hypertrophic and had large nuclei with squared ends. The smaller blood vessels showed no significant changes. The valves and coronary vessels were normal. No histologic features of lupus erythematosus were demonstrated.

Case 2. A 36-year-old colored, married laborer was admitted to the hospital with complaints of progressive exertional dyspnea, orthopnea, paroxysmal nocturnal dyspnea, cough, anorexia and malaise of 6 weeks' duration. The past history and system review were noncontributory. The patient appeared acutely and chronically ill and dyspneic, with the pulse rate 140 and the blood pressure 125/95. There were moderate venous distention, basal dullness and rales, cardiomegaly, gallop rhythm, pericardial friction rub, apical systolic murmur, hepatomegaly, and 1 plus dependent edema. Electrocardiograms showed low voltage, a rate of 128 to 140, and T-wave inversion in Leads $V_{4,\ 5}$ and $_6$. Chest X-ray showed pulmonary congestion. Hemogram was normal save for moderate leukocytosis. Sedimentation rate and urinalysis were normal.

The course in hospital was rapidly and progressively downhill. The narrow pulse pressure, tachycardia, gallop rhythm and dyspnea were unaltered by diet, digitalis and diuretics and by a course of thiamine chloride. Drenching sweats occurred almost nightly. Pulmonary infarction occurred, accelerating the patient's decline, and he expired 16 days after admission and 2 months following the onset of symptoms. Postmortem findings included cardiac dilatation and hypertrophy, mural thrombi, multiple pulmonary embolism and infarction, with pleural effusion, pericardial effusion, ascites, and chronic passive congestion of the lungs, liver, spleen, pancreas and kidneys. Microscopically, the ventricular epicardium was thickened. There was marked separation of myocardial fibers from their sheaths and cloudy swelling of fibers. Subendocardially there was slight vacuolization of the muscle fibers. There was no cellular infiltration. Within one of the veins in a sinus of the myocardium were seen organized thrombi. The thrombus within the myocardial sinus had undergone recanalization and reendothelialization. Sections of the coronary vessels revealed an eccentric intimal hyperplasia. The valves and coronary vessels were normal.

Case 3. A 24-year-old colored laborer was admitted to the hospital with symptoms of cough, exertional dyspnea and ankle edema of 1 week's duration. Physical examination showed the pulse rate 112, the blood pressure 100/80, cardiomegaly, gallop rhythm, a systolic murmur, basal rales, questionable ascites, and dependent edema. Hemogram, sedimentation rate and urinalysis were normal. Electrocardiograms showed tachycardia and low to inverted T waves in Leads $V_{5,\ 6}$ and Lead II. The patient left the hospital against advice, to return 2 months later with similar symptoms and findings plus chest pain and hemoptysis. The subsequent course was marked by repeated pulmonary embolism and multiple infarctions, and eventually loculated pleural effusion. Blood cultures were consistently negative. Digoxin was partially effective only, and massive penicillin therapy altered the picture but little. After 1 month in the hospital and failure of a trial on salicylate therapy, a working diagnosis of idiopathic myocarditis was agreed on after consultation, and cortisone and aureomycin treatment was initiated with immediate improvement. Diuretics assisted in checking edema accumulation. Surgical attack on the empyema was begun 1 month after cortisone, and throughout the succeeding 6 weeks several operative procedures relieved the pleural infection. At this writing the patient is afebrile and asymptomatic and free from any evidence of congestive failure, although a sinus tachycardia of about 100 persists. Cortisone was stopped after 2 months and digoxin 1 week later. The electrocardiogram at present shows inverted T waves in Leads V_4 and $_5$. A recent X-ray film shows a homogenous density at the right base. The patient has remained symptom-free. One week of cortisone orally since discharge from the hospital failed to influence the persistent tachycardia.

SUMMARY

Nonspecific myocarditis is thought to represent a definite entity, possibly of virus origin; which usually selects its victims from the third, fourth or fifth decades of life; which pursues a disheartening, progressively downhill course characterized by cardiomegaly, tachycardia, gallop rhythm, advancing cardiac failure, embolization, and resistance to the usually effective therapeutic agents; which yields at the autopsy table little clue to causation, showing only isolated myocardial degenerative and inflammatory changes, plus such other lesions as may be incident to embolism, infarction or congestive heart failure; and which by virtue of these features offers a challenge to stimulate epidemiologic, etiologic, diagnostic and therapeutic investigation and analysis in an attempt to remove one more disease from the "idiopathic" vacuum.

Three case histories are presented from personal observation to illustrate the points of this discussion.

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RECENT ADVANCES IN DIAGNOSIS*

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IN THE short time at my disposal my remarks must necessarily be highly selective. Besides the multitude of diagnostic methods that might be discussed, there is also the interpretation of the word "recent," which is relative and might mean any time from ten days to a hundred years. I shall comment on some things which are undoubtedly familiar to you and which you will, therefore, consider not to be new. However, some older methods may need a little clarification. I shall discuss mainly those methods that I consider of particular interest to general clinicians, among whom I number myself. Dr. Comroe has given you a dissertation on functional tests of certain systems of the body which summarized the important features of modern diagnosis. My remarks will be in the nature of an evaluation of frequently used diagnostic methods.

The busy practitioner has little time to perform most diagnostic tests, but he must know when to order them and how to interpret them. He must never be too busy to obtain a complete history and make a thorough physical examination, which together still constitute the most important phase of medical practice. He must not delay ordering carefully chosen special examinations and tests lest important time be lost in the diagnosis and treatment of serious diseases. Watchful waiting may be criminal procrastination. I realize that inertia or consideration of the economic aspect are often responsible for serious delays.

Cardiovascular Diseases

The average case of cardiac disease is usually easily diagnosed, but there is the occasional case in which it is difficult to tell whether congestive failure exists. It is in these cases that estimation of venous pressure and/or circulation times is of importance. These tests are easy to perform and can be done in the office as well as in the hospital. The normal range of venous pressure is 40 to 120 mm. of water. Values from 120 to 200 mm. are probably diagnostic and those over 200 mm. are definitely diagnostic, provided pressure in the right upper quadrant of the abdomen causes a sustained rise of pressure of 20 mm. or more. This maneuver rules out other causes of elevation of the venous pressure, such as obstruction in the superior vena cava or its tributaries, pericardial effusion and constrictive pericarditis. The most important precaution is the reference point, which is the level of the right auricle, the patient being supine. For circulation times various test substances are employed. I prefer a solution of magnesium sulfate for the arm-to-tongue time; ether for the arm-to-lung time. The normal range for the former is 9 to 16 seconds, for the latter 4 to 8 seconds. It must be remembered that hyperthyroidism and beriberi associated with heart failure usually do not produce much prolongation of the circulation times. A sharp endpoint depends upon the patient's intelligent coöperation.

The electrocardiogram is a very important adjunct in cardiac diagnosis. Serial grams are always advisable when there is a question of myocardial infarction. It is now generally recognized that Wilson's precordial leads are essential. One must remember that a normal electrocardiogram does not exclude cardiac disease and that the electrocardiographer must be given the essential points in the history if his interpretation is sought. There must be myocardial damage or ischemia before the electrocardiogram reflects coronary artery disease. When symptoms suggestive of angina pectoris exist and the electrocardiogram is normal, a stress test is indicated, provided there is no evidence of congestive failure or recent myocardial infarction. The simplest and most logical test is to have the patient exercise in his usual fashion before repeating the electrocardiogram. ST depression and T-wave changes constitute a positive test. These may be induced even without the production of pain by exercise.

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Angiocardiography is of value in determining the type of congenital heart disease, and cardiac catheterization is even more valuable in this regard. These examinations are left to the experts in this field. Their importance lies in the fact that some congenital heart diseases are amenable to surgical treatment, namely, patent ductus arteriosus, tetralogy of Fallot, pure pulmonary stenosis, coarctation of the aorta and pulmonary arteriovenous fistula.

Roentgen kymography is of value in doubtful cases of myocardial infarction and ventricular aneurysm.

Ballistocardiography, vectorcardiography, and electrokymography have their place, but in my opinion they are not necessary modalities for everyday clinical diagnosis.

Electrolyte studies are sometimes of value in the cases of patients with congestive failure who are not responding well to therapy. For instance, when patients finally fail to respond to the use of mercurial diuretics, it may be found that excessive amounts of chloride have been lost, and that hypochloremia and alkalosis exist. Administration of ammonium chloride corrects this imbalance. When sodium has been removed excessively by the sodium restriction regimen of a low sodium diet and the use of cation exchange resins, another type of imbalance results, with reduction of serum concentrations of both sodium and chloride, when acidosis and azotemia are usually present. This condition produces the low-salt syndrome, which is relieved by the administration of salt. A proper understanding of these and other electrolyte imbalances demands a knowledge of electrolytes in terms of milliequivalents rather than in terms of milligrams or grams per cent. These values can readily be learned by a little study.

Vascular Diseases

In reference to vascular diseases, there is not much new to report. In regard to hypertension, that common and important disease, we must differentiate essential hypertension, hypertension secondary to renal disease, and that due to pheochromocytoma. The first two are separated on the basis of whether the evidence indicates that renal disease was first or last. The hypertension of pheochromocytoma, a rare disease, was originally thought to be paroxysmal, but now it is realized that the hypertension is just as often persistent. The benzodioxane test is sufficient in the majority of cases to reveal the disease. This drug, an adrenalin antagonist, when injected intravenously, rapidly causes a clearcut fall in blood pressure with pheochromocytoma. If hypertension is not present at the time of the test, a histamine injection will paradoxically cause a rise in blood pressure.

Sympathectomy is performed in some cases of essential hypertension, although it has not become very popular. It is important to know, among other things, whether the blood pressure will fall to a worthwhile level when the sympathetic is depressed. One method is to put the patient to sleep with sodium amytal. Another is to use a sympatheticolytic drug. Two such drugs used for this testing are tetraethylammonium chloride, or Etamon, and hexamethonium, or Bistrium bromide. These are given intravenously in doses of 2 or 3 c.c. with the patient supine. In favorable cases the blood pressure drops very soon to a satisfactory level.

In the field of peripheral vascular diseases, there is not much new to report. The physician can make the diagnosis of the type of disease and the extent of involvement in the vast majority of cases by means of sight and touch. The age of the patient, his sex, the adequacy of the peripheral circulation in spite of occlusion of large vessels, and the presence of trophic or necrotic lesions go together in a pattern for diagnosis. Obliterative arteriosclerosis constitutes 95 per cent of peripheral vascular disease. Concomitant superficial phlebitis is rare with this disease but usually present with thromboangiitis obliterans. Oscillometry affords some additional information but it is not essential. Arteriography has served its purpose mainly as an investigative tool except in cases of cerebral and renal diseases, where it is of value in discovering and localizing vascular and neoplastic lesions. Most cases of arteriovenous fistula are easy to diagnose, but in difficult cases, especially congenital ones, determination of the oxygen content of venous blood in the region will show values approaching arterial.

Renal Diseases

The old standbys are still useful and frequently sufficient in cases of renal disease. Perhaps the most useful of all in the detection of early renal insufficiency is the concentration test. The old phenolsulfonphthalein test is of limited value, giving information only in the more advanced stages. Blood chemical studies likewise are useful only in the late phase. The urea clearance test, applicable only in good laboratories, is of considerable value. It is the most delicate test of renal function but requires great care and cooperation in its performance, with urea determinations of the blood and in two urine specimens. Impairment of function is shown when the kidneys fail to clear more than 50 per cent of the normal maximum of 75 c.c. of blood of its urea per minute when secreting 2 c.c. or more urine per minute, or more than 50 per cent of the standard of 54 c.c. of blood of its urea per minute when the kidneys are excreting at the rate of less than 2 c.c. of urine per minute. The newer clearance tests, usually performed only by those more experienced, allow quantitative evaluation of renal blood flow, glomerular filtration and tubular function. Renal blood flow is determined by introducing a substance into the circulation such as Diadrast or para-aminohippurate in such concentration that it will be entirely removed in its initial passage through the kidney. Average normal values are 697 c.c. of plasma per minute for males and 594 c.c. for females. Glomerular filtration rate is determined by introducing a nonmetabolized substance such as inulin, which is filtered by the glomeruli but neither secreted nor absorbed by the tubules. When renal blood flow is normal the average glomerular filtration rate is approximately 131 c.c. per minute in males and 117 c.c. in females. For testing the tubular functions of excretion and absorption the amount of Diadrast and para-aminohippurate excreted by the tubules may be calculated. As the plasma levels of either material are increased it is found that beyond a certain concentration no further amount of material will be secreted by the tubules per unit of time, thus allowing one to determine maximum tubular secretion. Normal average values for Tm Diadrast are 52 mg. per minute for males and 42 for females. The average value for Tm PAH is 77 mg. per minute. By the same token the absorption power of the tubules may be determined. Normal values are 375 mg. per minute for males and 303 for females. The relative values of these functions allow an evaluation of these phases of renal function in the over-all picture of renal failure. When performed serially they serve as a means of determining the rate of progress of the disease.

A knowledge of electrolyte disturbance in renal disease is important. One of the newer things is our awareness of the increased concentration of potassium in the blood, hyperkalemia, in cases of oliguria and anuria. From the normal of 3.5 to 5.3 milliequivalents per liter, the serum potassium may rise to disastrous levels of 7 to 8 mEq. per liter or more, with such clinical manifestations as numbness and tingling of the extremities, weakness, mental confusion, pallor and bradycardia. Perhaps the most reliable index of hyperkalemia is the electrocardiographic alterations of high, sharp T waves, prolongation of the QRS complex, and arrhythmias. Cardiac arrest may follow. Another effect of renal insufficiency is the loss of calcium by precipitation of insoluble calcium phosphate in the intestines because of deficient phosphate excretion by the kidneys. A low serum calcium may cause tetany and convulsions. This deficit may be corrected by giving aluminum hydroxide orally (30 c.c. 3 times a day) before alkali is given to correct the acidosis of uremia. Phosphorus is thus precipitated in the gut and its serum concentration reduced.

Blood Diseases

New knowledge has been acquired regarding blood coagulation and blood types. In the realm of diagnosis the study of bone marrow smears is of great importance. Many types of disease can be determined. As examples, I might mention aleukemic leukemia, aplastic anemia and myelophthisic anemia. The marrow of the sternum has been used largely, but the crest of the ilium and the ribs are also needled in case a spotty distribution of the disorder exists. Lupus erythematosus of the disseminated variety may be discovered by the finding of so-called LE cells when the marrow is heparinized. The plasma cells of multiple myeloma may be found in large numbers in the marrow and the diagnosis established. Many other diseases may be disclosed. That interesting condition or group of conditions called hypersplenism is diagnosed by finding the combination of a normal or hyperplastic bone marrow and an increase in the number of circulating cells, particularly of the types reduced—erythrocytes, leukocytes, platelets or combinations, when 0.5 to 1 c.c. of a 1:1000 solution of epinephrine is injected subcutaneously for the purpose of contracting the enlarged spleen. The final proof, of course, is the cure by splenectomy.

The hemolytic anemias have always excited interest. These are congenital or acquired. The spherocytic congenital variety is easily recognized and is cured by splenectomy. The acquired idiopathic variety is the bugbear. This form is caused by a hemolysin active for all erythrocytes, whereas in congenital hemolytic anemia it is due to a defect in erythrocyte structure. Certain serologic tests are employed to determine the presence of warm and cold hemolysins and cold agglutinins or incomplete antibodies (those which alone can cause no erythrocyte clumping). In those patients whose serum contains no demonstrable agglutinins or hemolysins the developing Coombs test, using an anti-human-globulin rabbit serum, demonstrates globulin antibodies adsorbed to the surface of the red cells. Of the latter, some cases are cured by splenectomy, some are not. Persistence of a positive Coombs test indicates that antibodies are manufactured in other organs as well as the spleen.

A new test for cases of hemorrhagic disease is the prothrombin consumption test based on the principle that by determining prothrombin before and after coagulation is complete a measure of plasma thromboplastin that reacts with prothrombin is obtained. Prothrombin consumption varies considerably in normal people. In hemophilia the test is more specific than the prolongation of the coagulation time, and it is quantitative, even in atypical cases and before abnormal bleeding has occurred. Since the result is low in thrombocytopenia, a thrombocyte count may be necessary. Congenital hypoprothrombinemia can simulate hemophilia, and a prothrombin time determination should always be made. In hemophilia it is normal.

An improved method for the determination of blood volume employs Evans blue dye (T-1824). The practical application is in the estimation of pre- and postoperative requirements for transfusions, especially for those patients who have been ill for a long time. They may be severely anemic and yet have a fairly normal hemoglobin and erythrocyte count. Patients with cardiac failure are susceptible to circulatory overload. In them the determination of the blood volume gives one a clue as to their tolerance to transfusion.

Diseases of the Lungs

Considerable progress has been made in recent years in the testing of pulmonary function. For over a hundred years tests were limited to attempts to estimate the volume of air that could be forcibly expired from the lungs. Now we measure maximum breathing capacity, determine the function for each lung separately and simultaneously (bronchospirometry), estimate total lung volume including residual air, measure ventilation and rate of oxygen consumption at rest and following exercise, and determine arterial oxygen saturation at rest and following exercise. The use of these tests including fluoroscopy has increased the margin of safety in surgery of the chest and has permitted more intelligent planning of collapse therapy and resection.

I want to make a plea for earlier diagnosis of serious diseases of the lung, especially bronchogenic carcinoma. Many still consider bronchoscopy a formidable procedure, but actually it is very simple. It should be employed early in every case of chronic cough in which the diagnosis is not readily made. When direct visualization and biopsy of a lesion are not possible, bronchial washings are made and may reveal neoplastic cells. The sputum should also be examined by the Papanicolaou method. It must be remembered that bronchogenic carcinoma often does not reveal itself roentgenographically until secondary effects occur, such as obstruction with atelectasis and infiltration. In any questionable case exploratory thoracotomy is advisable. It is no more risky than exploratory celiotomy.

Contrast bronchograms are advisable in many cases of chronic pulmonary disease but are not without some danger.

In cases of suspected active tuberculosis sputum cultures are necessary unless the smear is definitely positive. When there is no sputum, bronchial and gastric lavages are employed in search of the acid-fast bacilli. Gastric lavage is more commonly used, three successive lavages being the rule. In some cases bone marrow cultures are positive.

One must not forget coccidioidin and histoplasmin skin tests in cases simulating pulmonary tuberculosis when a diagnosis of that disease cannot be established.

Gastrointestinal Diseases

When it comes to the stomach our old reliable is roentgenography. This, however, does not always solve our problem of the chronic dyspeptic or the patient with early cachexia in whom we are looking for a cause. Some of us are inclined to look upon gastroscopy as a formidable procedure, but in trained hands it is quite simple and not very punishing to the patient. When the X-ray examination is equivocal it is certainly indicated, and serial examinations are sometimes advisable. We must not blame the gastroscopist if he misses a lesion, since certain areas are not visualizable. Now we have the flexible operating gastroscope to aid in the interpretation of the nature of a lesion. Roentgen diagnosis will be sharpened by the double contrast study in which the swallowing of thin barium is followed by the injection of air into the stomach. In this way, for instance, polyps may be differentiated from large rugae.

The examination of gastric washings may reveal neoplastic cells. An abrasive balloon has been invented for the collection of cellular material from the stomach. The normal stomach resists mechanical irritation, but cells are easily abraded from cancers.

I mentioned potassium retention under "Diseases of the Kidneys." Here mention should be made of potassium deficit when patients cannot eat properly, vomit a lot, or have potassium diuresis from ACTH administration. It also may occur in diabetic acidosis during treatment. Here again lies the importance of electrolyte determinations. The symptoms are drowsiness, weakness, languor, chronic ileus with distention, anorexia, nausea, edema and oliguria. The diagnosis is established by asking for serum potassium and chloride levels, carbon dioxide combining power, and an electrocardiogram. Values of 3 mEq./L. or less indicate serious potassium depletion. The electrocardiographic changes are lengthening of the Q-T interval due to broadening of the T wave, lowering or inversion of the T wave, and sagging of the S-T segment. Alkalosis occurring with hypochloremia is associated with potassium deficit and is resistant to sodium chloride replacement but responds to the administration of potassium salts natural to meat juices. If parenteral use is necessary, a solution containing 1 to 3 grams of potassium salts per liter may be given at the rate of 8 to 12 c.c. per minute. The normal daily balance of potassium involves a turnover of 3 to 4 grams.

I know of no diagnostic procedure more important than sigmoidoscopy. We used to lament the failure to do a digital rectal examination. Now we should lament the failure to employ the sigmoidoscope. Most of the cancers of the lower bowel lie within its reach. In the clinic in which I work we do a sigmoidoscopic examination routinely in every new case. We found among 500 patients who had no complaint referable to the lower bowel 48 with polyps, which are precancerous lesions, and 5 with cancers. Four of the latter were curable. The polyps were all removed. At this point I wish to make a plea for every practitioner to run a cancer detection clinic. He can make most of the examinations himself that are done in cancer detection clinics. With easy training he can learn to use the sigmoidoscope. He can send cervical smears to the pathologist for Papanicolaou examinations, and he usually knows capable specialists whom he can call upon for special services like bronchoscopy.

Diagnosis of the nature of liver disease is improving. Tests of hepatic functions and needle biopsy leave little doubt in many cases. When recent jaundice is present the thymol turbidity test or cephalin-cholesterol flocculation test is positive if there is active parenchymatous disease (hepatitis). Urinary and fecal urobilinogen is normal or increased in cases of hepatocellular jaundice, low or absent in cases of obstructive jaundice. An elevated serum alkaline phosphatase indicates biliary obstruction. The bromsulfalein test shows us chronic liver damage provided there is not much jaundice. Serum bilirubin determinations reveal whether jaundice is hemolytic or not and aid in following the progress of hepatitis. Other tests are employed, but one does not have to use them all. A bit of liver tissue may be obtained with a special needle and with little risk. Examination of this tissue is of great value when there is diffuse hepatic disease and one is in doubt as to whether a patient with jaundice should be operated upon or whether a large liver is a fatty one or represents advanced cirrhosis.

When acute pancreatic edema or necrosis is suspected, determination of the serum amylase is essential for diagnosis. Amylase is elevated in the early stage. Serum lipase should be determined if the serum amylase is of doubtful value, since the two enzymes are not always simultaneously elevated. Acute pancreatitis should be suspected if there is severe epigastric pain and tenderness without muscular rigidity, upper abdominal distention, flatulence, vomiting, and a rapid weak pulse, especially in a stout, elderly patient with a history of "indigestion." Chronic pancreatic disease is often difficult to diagnose. Tests of pancreatic function are elaborate and difficult of interpretation. They are too involved for daily practical application.

METABOLIC AND ENDOCRINE DISEASES

The practitioner sees many patients with diseases of the thyroid gland and diabetes mellitus. With the former, clinical judgment cannot be replaced by laboratory tests. The basal metabolic rate is notably unreliable, especially when it is elevated. Also, a normal BMR may be obtained in some cases of hyperthyroidism. Reduced rates may mean hypothyroidism or only hypometabolism not the result of reduced thyroid function. Unless the clinical aspects agree with the BMR reading, repeated BMR's should be ordered if value is to be derived from this test.

The most confusing situation is the persistent finding of rates from minus 15 per cent to minus

20 or minus 25 per cent. In most cases the patient does not have hypothyroidism. Therapeutic trial of thyroid extract may help. If symptoms clear up, the case is more likely one of hypothyroidism than simple hypometabolism. The prolonged use of thyroid extract is deprecated unless the patient does have thyroid insufficiency.

The serum cholesterol, which tends to be decreased with hyperthyroidism and increased with hypothyroidism, should be discounted also unless the result agrees with the clinical picture. A significant increase, above 300 mg. per cent, usually obtains in cases of myxedema.

In doubtful cases of hyperthyroidism one may either test the effect of propylthiouracil or better, if available, get a protein-bound iodine concentration of the serum or plasma, which is a sensitive index of the level of the circulating thyroid hormone. The technic is difficult and requires meticulous performance in a laboratory free of iodine fumes and with patients who have not been receiving thyroid extract, iodine or thiourea compounds. The determination of the organic iodine fraction is particularly valuable in identifying cases of hypermetabolism without hyperthyroidism. The concentration of total blood iodine is less satisfactory. Protein-bound iodine is increased in hyper-, decreased in hypothyroidism.

The radioactive isotype, I_{131}, with a half-life of 8 days, is useful in the diagnosis of thyroid disease. Measurement may be made of the uptake by the gland and excretion in the urine. In hyperthyroidism more I_{131} is taken up by the thyroid and less is excreted in the urine; in hypothyroidism the reverse is true.

It is the discovery of the mild cases of diabetes that is needed. In these the urine is frequently free of sugar and the fasting blood sugar normal. Diabetes detection drives based on urinalysis fail to detect many of these mild cases. A good screening test is a blood sugar estimation one hour after a breakfast that includes bread or cereal and sugar. One must be sure that the patient has been on a normal diet. If the blood sugar is between 170 and 200 mg. per cent, the patient is a diabetic suspect. If over 200 he most certainly has diabetes. In the doubtful cases a glucose tolerance test is done. The most satisfactory is determination of blood sugar $\frac{1}{2}$, 1 and 2 hours after the ingestion of 100 grams of glucose. With diabetes, the peak at $\frac{1}{2}$ or 1 hour is over 170 and, even more important, the value at 2 hours should be above 130.

There is great activity in the endocrine field. Hormone analyses are helping to clarify many problems. Unfortunately, these are time-consuming and expensive. Estrogen and gonadotropin analyses are not used widely as routine tests on that account. Quantitation of 17-ketosteroids gives important information, and relatively simple though time-consuming methods are widely used.

The eosinophil has recently come into greater prominence. Simple, accurate methods for counting have been developed. Normal values for peripheral blood are 50 to 300 per cu. mm. for adults and 50 to 700 for children. The eosinophil count is now used as a basis for testing adrenal cortical function. There is a characteristic fall in circulating eosinophils following the injection of adrenocorticotropic hormone (ACTH). Either 0.3 c.c. of 1:1,000 epinephrine is injected subcutaneously or 25 mg. of ACTH intramuscularly. A fall in circulating eosinophils in 4 hours of 50 per cent or more indicates normal response of the patient's adrenal cortex. A positive test with epinephrine must be interpreted as a measure of a nonspecific stress reaction of the intact organism. Eosinopenia is seen in response to stress caused by infection, surgical operation and many other traumatic conditions. Recovery from the stress state is marked by a return of eosinophils to normal or high levels, indicating compensation by the pituitary-adrenal mechanism. If the count remains low, a poor prognosis is indicated. The stress test described is used preparatory to the administration of ACTH for therapeutic pur-

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President's Page

SOCIETY AND THE PHYSICIAN

XI. The Physician and Progress

I, personally, feel that we in the United States have one of the finest systems of medical care in the world. We, as individuals, and as organizations, have worked hard to attain this superior level. Infant and maternal death rates have decreased. The span of life has lengthened. Infectious disease is being brought under control so that now we must devote more time to the degenerative conditions. People live longer and their machinery runs down instead of being interrupted by disease. This, of course, offers a challenge.

However, this is not the greatest challenge facing every physician and organized medicine today. We are beset, from without and within, by critics of our system of providing and paying for medical care. Certain impractical idealists and grasping bureaucrats would have Government-controlled "socialized medicine," overlooking the experience of New Zealand (who tried and abandoned it) and of England, who is in the throes of trying to pay for such an ill-conceived program. I am convinced that compulsory Government-controlled medical care is not good for society or the medical profession.

This negative statement, however, does not relieve me (or you, or the AMA) of responsibility. It makes it more important and imperative that we furnish an answer and work diligently at implementing it. I have been, and am, critical of the AMA in its early passive attitude toward voluntary medical planning, and its more recent overemphasis on "public relations," "lobbying," and political wooing.

But I offer this criticism as a member of the AMA. I feel that you and I must make ourselves felt in two ways. First, we must continue to send delegates who are intelligent and progressive. We must continue to sponsor actions (rather than words) which prove our interest in providing, distributing, and paying for, the best medical care in the world. We, as individuals, must inform ourselves, so that the opinions we express, and the actions we sponsor, will make sense.

Second, whenever the opportunity offers, in national or local elections, we must work and vote for the men and measures that will allow American Medicine to work out its salvation on a voluntary basis. Then we must work it out!

Frank J

Editorials

TEACHING THE TEACHERS

The Conference on Medical Teaching Technics sponsored by the Society early in April obviously filled an important need. There were proofs enough in the large size of the audience, the enthusiasm of audience and speakers alike, and the many requests for a repeat performance.

Of course a prime motive in planning the Conference was the knowledge that very few medical teachers have been trained in educational methods. According to Dr. Donald G. Anderson, Secretary of the AMA Council on Medical Education and Hospitals, "... none of the medical schools (in the United States) have established formal programs for educating their faculty members in pedagogical technics." The opportunities for learning about such technics are even less for other American teachers of medicine.

One might speculate that the teachers who are not faculty members are likely to be better "natural" educators than some who are. A good many faculty members are selected for their proficiency in diagnosis or research or both, and without appraisal of their ability to teach their skills to students. On the other hand, the man who holds no faculty appointment must usually earn his reputation as a teacher.

It is always difficult to evaluate the effectiveness of a teacher. It is even harder to discover the reasons for effectiveness. These facts were emphasized repeatedly at the Conference. In the same way, it would be hard to learn whether or not the Conference was a potent educational effort. However, it was successful in demonstrating that many people are anxious to know how to do a better job of teaching. This proof of interest is, in itself, a notable contribution to medical education. The eventual effects of the stimulus provided by this unique Conference should be interesting to watch.

H. H. H.

THE EVALUATION OF DYSPNEA OR SHORTNESS OF BREATH

The measurement of dyspnea has always been difficult because of the subjective element in this disorder of respiration. This is brought out in the definition of dyspnea as an awareness of the necessity for increased breathing. In the stoical individual, therefore, increased breathing may be present without an awareness on the part of the subject, and this is termed hyperpnea. Although diseases of the heart and lung are prime causes of dyspnea, there are other important conditions producing shortness of breath.

The obese person and those employed in sedentary occupations may become dyspneic on mild exertion because of an inability to develop a notable oxygen debt. In this condition there is no disease of the heart or lungs or impairment in ventilation, and improvement follows weight reduction and physical conditioning. If such individuals develop a heart or lung disorder, the separate factors are additive and dyspnea appears earlier in the course of the disease.

Patients with various types of psychoneuroses

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

and particularly those with anxiety states suffer commonly with shortness of breath. This may take the form of hyperventilation or sighing respirations and not uncommonly is associated with giddiness, dizziness, numbness, and tingling of the extremities or tetany. In these patients constricting undergarments or belts interfere with the free action of the diaphragm or intercostal muscles and tend to augment dyspnea. In children and more uncommonly in adults, breath-holding may lead to dyspnea because of gaseous acidosis (retention of carbon dioxide). It is well to note that in many instances anxiety complicates heart and lung disease and may be a big factor in the production of dyspnea. Failure to recognize this may lead to unnecessary digitalization and other therapy under the mistaken diagnosis of congestive failure or pulmonary decompensation.

Certain metabolic changes may also lead to shortness of breath. Perhaps the most common examples are uremia and diabetic acidosis. Elevation of the basal metabolic rate and anemia may likewise be factors.

Direct stimulation of the respiratory centers by the nearby presence of tumor or hemorrhage or from large amounts of salicylates may result in hyperpnea and dyspnea.

However, it is not our purpose to discuss the differential diagnosis of shortness of breath, but to consider objective methods for the evaluation of pulmonary involvement.

The difficulty of distinguishing between dyspnea caused by heart disease and that resulting from pulmonary disease in some cases is generally appreciated. A good physical examination and a careful history are still the best methods for making the differential diagnosis. Determination of the venous pressure, especially in the younger age group, may be helpful, but the venous pressure may be elevated in both cardiac and intrinsic pulmonary disease. Estimation of the circulation time, in our opinion best performed by the rapid intravenous administration of 5 c.c. of 20 per cent calcium gluconate, is frequently helpful but may be misleading. In the presence of intrinsic pulmonary disease the circulation time is normal, less than 18 seconds, and in heart failure it is generally prolonged beyond 20 seconds. However, in heart failure, associated with hyperthyroidism or severe anemia, in failure accompanying acute nephritis or in beriberi heart disease the circulation time may be more rapid or in the normal range rather than prolonged. Roentgen examination of the chest except for the determination of heart contour and size may also be misleading in making the differential diagnosis.

In view of these conflicting factors and especially because of the difficulty of differentiating dyspnea caused by various types of intrinsic pulmonary disease, the work in recent years of Cournand, Riley, Baldwin, Harden, and their associates assumes great importance. Pulmonary function has been divided into two phases: The ventilatory phase is concerned with those mechanisms by which air is moved into and out of the lungs, while the respiratory phase is concerned with the gaseous exchange between the blood and the air. Insufficient ventilation results in dyspnea, whereas impairment of gas exchange leads to cyanosis.

Although many of the tests of pulmonary function are difficult to carry out or require technical apparatus and are thus limited to the larger teaching centers of medicine, some of them are simple, easily performed, and give valuable information. There is no reason why these may not be performed in the physician's office. A machine may be employed which resembles a Benedict-Roth metabolism apparatus except that the tank has a 9-liter capacity. The directional valves and the soda lime container are removed to lessen the resistance in the circuit. The record of ventilation, traced in ink, is recorded on a motor-driven drum revolving at a speed of one-third revolution per minute. Subjects are comfortably seated, and after a rest and explanation of the tests the tank is half filled with room air and the patient connected to it by a rubber mouthpiece. Breathing through the nose is prevented by a nose clip. After several tidal or normal respirations are recorded the patient is told to take the deepest breath possible (complemental air) and then to exhale to the best of his ability. In this way the vital capacity is measured, the time required to inscribe it is known, and the slope of the exhalation time is apparent. Normally this time is less than 3 seconds and there is very little slope to the exhalation curve. The complemental air may be subtracted from the vital capacity to give the value for the supplemental air. A few more tidal breaths are recorded, and the maximum breathing capacity is determined by having the subject breathe in and out as rapidly, deeply and comfortably as possible for a 15-second period. After 3 or 4 tests are recorded the tracing is ready for analysis.

The ventilatory pattern in congestive heart failure is not distinctive. The vital capacity is reduced, with the greater part of the reduction occurring in the complemental air. There is also some reduction in supplemental air. Vital capacity exhalation time is only slightly prolonged. Maximum breathing capacity (M.B.C.) is greatly reduced. The tests will disclose any complicating pulmonary disease in the form of fibrosis (hemosiderosis, for example) or emphysema. In these instances there will be a greater reduction in complemental air than usual or notable increase in vital capacity exhalation time. In addition, it appears that the M.B.C. is perhaps the most sensitive indicator of early congestive failure. A reduction in M.B.C. precedes any reduction in vital capacity by some time. In intrinsic pulmonary disease these tests are helpful in following the course of the disease, determining its extent, and evaluating therapy. It is now apparent that pulmonary function tests are far more reliable than X-ray examination and more closely parallel the actual symptoms of the patient. In some instances of sarcoid or silicosis, in which extensive lesions are noted in X-ray films, pulmonary function tests reveal only slight diminution in function and the patient has relatively few symptoms. On the other hand, occasionally the X-ray films may show little involvement, but the patient is frankly dyspneic and pulmonary function studies reveal extensive involvement.

Similarly, in the case of emphysema early diagnosis and precise follow-up by X-ray examination is difficult, whereas it is easily and accurately determined by the use of these tests. In emphysema there is reduction in complemental air, but the greatest change is noted in the prolongation of the vital capacity exhalation time and reduction in supplemental air. In a severe case of emphysema, after a deep breath the vital capacity determination may even stop above the base line ("pulmonary set") without any measurable supplemental air. It is not generally appreciated that emphysema may be present, and actually is more frequently present, in a normal-shaped chest. This may account for the poor correlation between the clinical diagnosis and the postmortem findings. The more widespread use of pulmonary function tests would undoubtedly increase the number of correct clinical diagnoses.

In pulmonary fibrosis, in general, complemental air is the compartment most severely affected, and the vital capacity exhalation time is but little prolonged. However, in fibrosis secondary to endobronchial disease, such as chronic bronchitis and tuberculosis, and in endobronchial involvement with sarcoid and silicosis, obstructive emphysema results and a mixed pattern of function tests is obtained. The tests are helpful in deciding what cases of sarcoid should be treated with cortisone or adrenocorticotropin. In the presence of a notable reduction of pulmonary function or a progressive decrease in function these drugs should be employed. At this time it appears that in following the course of any pulmonary disease, except tuberculosis and acute infection, the results of these tests give the most objective and most sensitive information regarding the progress of the disease and the evaluation of therapy.

JOHN J. CURRY, M.D.

In and Out of Focus

BY THE OBSERVER

An Experiment Succeeds

There was considerable skepticism expressed by the Special Committee on Teaching Technics when the Conference on Medical Teaching Technics was first outlined by Dr. Hugh H. Hussey. All agreed on the value of such a Conference and the need for it but most of those present were not sanguine about the number who would attend. It is with considerable pleasure that your Observer reports that the Conference, admittedly an experiment, was, to the surprise and gratification of everyone concerned, an unqualified success.

The story of the origin of the Conference is worth repeating. Your Observer had been urging the Executive Board of the Society to approve a course in medical writing. The Board had some misgivings, and it was at this point that Dr. Hussey suggested a program devoted to "teaching teachers." He enlarged upon his proposal explaining that what was later to be called the Conference on Medical Teaching Technics would not be planned for faculties of medical schools alone but for all physicians who taught.

The Board approved Dr. Hussey's proposal and a special committee was appointed consisting of the following: Dr. Hugh H. Hussey, Chairman, Drs. Lloyd G. Lewis, Zigmond M. Lebensohn, R. Bretney Miller, John A. Reisinger, and Nicholas J. Cotsonas. The Committee met shortly thereafter when Dr. Hussey outlined in general terms his conception of the program. Its initial reaction has already been described. At its second meeting there was far more enthusiasm and the program began to take definite form. From this point on, not only members of the Committee but a group representing hospitals and other medical institutions in the city lent valuable assistance in an effort to stimulate interest.

Skepticism in regard to attendance persisted even at this point. Since the program was confined to teaching technics, it was pointed out, it had a limited appeal. The Committee agreed that physicians participating should be required to pay a registration fee to cover the expenses of the Conference, but this too, it was thought, might prove a deterrent to attendance.

Your Observer was asked to canvass Society members and the faculties of all the medical schools in Virginia, Maryland, Pennsylvania, and North Carolina by mail. This publicity brought fair response, but it was soon discovered that the success of the Conference depended upon its being "sold" to the doctors. To the "tireless salesmen" without which the Conference would have failed, your Observer wishes to pay tribute. Prompted by their belief in the Conference, they continued to "convert" every doctor with whom they came in contact. Their "converts" swelled the attendance more than all the other publicity efforts.

As for the program, there were very few, if any, disappointments. So often what one expects to be excellent falls far short of that mark. In this instance, your Observer cannot think of a single failure. Dr. William Parson, Professor of Medicine at the University of Virginia, set a high standard in his opening talk. Dr. Morris Fishbein was all that was expected of him and more—brilliant, witty, and informative. Tom Jones, Professor of Medical and Dental Illustrations at the University of Illinois, was a source of valuable information about the use of lantern slides. Warren Sturgis, President of the Sturgis-Grant Productions of New York, proved a most pleasant surprise. He was an unusually effective speaker. J. H. Henning, head of the Department of Speech of the West Virginia University College of Arts and Sciences, was well equipped for his assignment. Dr. Walter Freeman could not have been a better choice for his topic, "Showmanship in Teaching." The same might be said for Dr. Harold Jeghers, "Building a Personal Library."

Among those not in the educational field but who contributed a great deal to the interest in the Conference were W. B. Davison, an official of International Business Machines, and "Dick" Mansfield, cartoonist for *The Evening Star*. The latter created much amusement with his drawings. The Panels on Informal Meetings and Formal Meetings, moderated by Dr. Wallace M. Yater and Dr. Brian Blades respectively, were also most profitable. Among those on the panels, all of whom gave a good account of themselves, were Drs. Thomas M. Peery, Paul Kiernan, W. Proctor Harvey, E. T. Lisansky, of the University of Maryland, Julian P. Price, of Florence, South Carolina, Hugh H. Hussey and J. H. Henning.

A pleasant, if somewhat startling, incident occurred at the close of the first day of the Conference. The program, which had begun at 9:00 a.m., closed at 5:30 p.m. Tired as they must have been after a long day, the audience were apparently so pleased that they remained to signify their satisfaction by applauding vigorously. It was the first occurrence of this kind that your Observer can recall, and he has never had anyone say to him what one Naval medical officer said as he was leaving the Conference, "This has been one of the most enjoyable days of my life."

Dr. Hussey, the last speaker on the program, brought the Conference to a dramatic close when he said:

> "There are said to be two basic requisites for education: a will to learn and a source for learning. The first is represented by an audience, the second by various kinds of educational programs—medical literature, schools, postgraduate assemblies, etc.
>
> "But something more is needed than these two basic requisites. There must be means for getting them together. The tricks for accomplishing this are concerned with such factors as opportunity, environment, and advertising and selling. Among these tricks, perhaps the most important is selling the program selling the message.
>
> "During this Conference it is surprising that no one else has mentioned the greatest physician, the greatest teacher any of us have known. There were no faults in His teaching technics. He was a humanist, He was humble. He taught by homely example, He used simple eloquent language, He was loved for Himself, there is no question that He was a real source of valuable information. He was the greatest showman of all time. You know the man I mean—Jesus Christ.
>
> "And He recognized that the success of His program for teaching depended upon more than His talents as a teacher and the hunger of people for knowledge. What did He do? He trained the greatest sales force for promotion of His program—the greatest sales force the world has ever known—and He sold His program. It's still a best seller.
>
> "There's a lesson in these facts. Putting over a program, even an excellent one, takes a lot of personal selling by the program planners."

The success which attended the pioneer effort of Dr. Hussey and his associates will undoubtedly encourage other medical organizations to venture into this field. It will be well worth their while, for, as the Conference participants were told, there is great need for "teaching teachers to teach."

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UCS-HSA Unless their memories of Washington go back a decade or more, physicians now active in the District of Columbia know little about the history of the Hospital Service Agency. If they have heard of the Agency at all, they are frequently under the impression that it is a Government bureau or department. This is regrettable, because the Agency has not only rendered a valuable service to the community and to the medical profession but is in large part a creature of the District Medical Society.

Briefly, the Agency's history dates back to January 1, 1935 when it consisted of two entities: the Medical-Dental Bureau and the Central Admitting Bureau for Hospitals. The former budgeted medical bills for those who found it difficult to meet such expenses; the latter screened patients seeking free care in the local hospitals. Both were established with the assistance, financial and otherwise, of our Society.

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Photos by Leslie French, M.D.

HEADLINERS AT THE CONFERENCE ON MEDICAL TEACHING TECHNICS

(1) Dr. Harold Jeghers tells registrants how to build a personal library; (2) Dr. Hugh H. Hussey, Chairman of the Committee on Teaching Technics; (3) Dr. E. T. Lisansky, of the Department of Psychiatry, University of Maryland; (4) W. C. Davison, Head of the Department of Education, International Business Machines; (5) Dr. W. Proctor Harvey; (6) Dr. Thomas M. Peery; (7) Dr. Brian Blades; (8) Dr. Walter Freeman; (9) Dr. Julian P. Price, Editor of the *Journal of the South Carolina Medical Association;* (10) Dr. Morris Fishbein, Chicago, an authority on medical writing; (11) Dr. Tom Jones, Professor of Medical and Dental Illustrations, University of Illinois; (12) Dr. J. H. Henning, Head of the Speech Department, West Virginia University; (13) Herman Van Cott, Armed Forces Institute of Pathology.

Your Observer recalls that he and the late George Crownhart, Secretary of the State Medical Society of Wisconsin, made a study of these two agencies in the summer of 1935. Physicians then active in the direction and promotion of these projects were Drs. Arthur C. Christie, Wallace M. Yater, and the late Coursen B. Conklin. Mr. Ross Garrett was the administrator of both agencies.

After a rather thorough inspection, Mr. Crownhart and your Observer concluded that the future of the Central Admitting Bureau was far brighter than that of the Medical-Dental Bureau, and that is the way it turned out. A few years later the two agencies were merged and became known as the Health Security Administration. Dr. Henry C. Macatee became President of Administration in July, 1938 and continued in that position for ten years. Dr. John A. Reed, who succeeded him, served nearly two years, resigning in December, 1949.

On April 27, 1948 Health Security Administration became the Hospital Service Agency. The new name was considered more appropriate in view of the organization's functions, which are: (1) to screen persons seeking free hospital and clinic care in order that only those who are entitled to such care receive it; (2) to follow up on those cleared for free hospital and clinic care to prevent duplication of services; and (3) to administer the hospitalization funds received from the Community Chests in the Washington Metropolitan Area.

As stated above, HSA's services are more closely related to hospitals than to physicians. Nevertheless, physicians too have a stake in the proper functioning of HSA. After all, only physicians can provide the needed medical care and they should be assured that only those who are eligible receive their services without charge.

Some hospitals have been severely critical of HSA and have charged that it is basically wrong in concept and costly to operate. They want to take over the determination of eligibility for free hospital care themselves. However, HSA has not been without friends among hospital officials and they have prevented its dissolution.

United Community Services of Washington recently appointed the Hospitalization Committee to study HSA with a view of recommending what should be done about its future. Dr. W. Ross Morris and your Observer were members of the Committee. The impression received at the first meeting was that some members of the Committee were not averse to abolishing HSA in favor of a somewhat similar agency proposed by the Hospital Council. Dr. Morris and your Observer made it clear that they would oppose any effort to do away with HSA. They admitted that there might be many things wrong with the Agency but none so serious that they could not be remedied. Furthermore, HSA's experience and its records were too valuable to be discarded. The Committee held several meetings and finally a report containing recommendations to the UCS Executive Committee was unanimously adopted. Among the major recommendations in the report were the following:

> "A. The UCS Hospitalization Committee, recognizing the need for a central agency to determine eligibility of persons to receive Chest help in the purchase of hospital care, and recognizing the existence of the Hospital Service Agency as the agency which has carried on this function on behalf of the Community Chest Federation recommends that UCS, in accordance with the recommendations to follow, use the Hospital Service Agency as the agency for the administration of Community Chest funds allocated for hospital care in the District of Columbia, provided that HSA shall be accountable to UCS in the same manner as any other Chest-supported agency.
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> "B. The UCS Hospitalization Committee raises questions about some of the present principles and practices of the Hospital Service Agency and therefore recommends that continuing study be made during 1952 of the administration of the UCS hospitalization program by HSA, with special reference to questions included below, and recommends that an evaluation report on the administration be made to the UCS Executive Committee not later than March 1, 1953."

There followed so-called "policy recommendations" in which the relationship of the hospitals, the Community Chest and the Hospital Service Agency was defined. The Board of Trustees of HSA was to be reorganized and to consist of 18 members, 6 from the hospitals, 6 from the medical profession, and 6 from the Chests "which use HSA as their agency for the purchase of hospital care," and the administrative budget of HSA was to be subject to scrutiny by authorized representatives of UCS.

To Dr. Morris and your Observer the most important result of the Committee's work was the decision to recommend the continuance of HSA; this having been agreed upon, they were content to go along with the other recommendations in the Committee's report.

Mr. Willard C. Smith, HSA's present Administrator, has had long and valuable experience in the health and welfare field, and, under his direction, the Agency should go forward to greater accomplishments.

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Medical Bureau

There is good news for subscribers to MEDICAL BUREAU. The BUREAU is in the process of enlarging its facilities and adding to its personnel so as to assure subscribers of the best service possible. As so frequently happens with all endeavors, the BUREAU suddenly reached a point where a reappraisal of its operations was necessary. Two occurrences hastened this action: an extensive publicity campaign directing public attention to BUREAU services and a virus epidemic in the early part of this year. It developed that the first burdened the BUREAU far more than expected. Milk bottle hangers on which had been printed essential facts about the BUREAU had been distributed by the Washington Milk Bottle Exchange throughout the city. As a result, telephone calls poured into the BUREAU requesting information about doctors, medical institutions, etc. The BUREAU might have survived this deluge without difficulty if it had not been for the epidemic, which strained the BUREAU to the breaking point. Operators were exhausted at the end of the day's work and trunk lines into the BUREAU were burdened to the point where busy signals became far too commonplace.

At the time this is written the situation has improved considerably, but the recent experience prompted the Medical Bureau Committee, the BUREAU's Manager, Mr. Lawrence A. Zupan, and your Observer to take immediate action so that what had happened would not recur. Not only will sufficient equipment and personnel be obtained to cope with any but the most critical emergency, but the basic operation will be revamped to permit the acceptance of additional Secretarial Service subscribers.

The solution to the BUREAU's problems is not as simple as was first thought. As your Observer has endeavored to make clear, it isn't a matter of more lines and more operators alone. The problem is far more complex than that and its solution will require time and thought. In the meantime the service should continue to be as efficient as it was before the recent emergency.

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Age Analysis

One of the most active committees of our Society at the present time is the Special Committee on Group Health and Accident Insurance. As is usually the case, this is largely due to its Chairman, Dr. Richard H. Todd, who has been tireless in his efforts to obtain facts on which his Committee can base its recommendations to the Society.

Members who read their mail will recall receiving a letter from the Committee a few weeks ago enclosing a form in which they were asked specific questions as to their interest in health and accident insurance and the benefits which they would like included in a group policy. There has been a surprising response to the Committee's letter, 659 members having been heard from.

An analysis of the replies was made by the Chairman, who requested that the Society's office staff prepare an age analysis of the organization's membership to be included in a letter to be sent to companies writing health and accident insurance. Here is the result of its "age" investigation:

Ages of Active and Life Members of The Medical Society of the District of Columbia as of December 1, 1951

Age Group	Number of Members in the Group
26–29	30
30–34	168
35–39	260
40–44	271
45–49	218
50–54	137
55–59	104
60–64	68
65–69	42
70–	103
	1401

Dr. John B. Nichols, long a prominent member of the District Medical Society, did some interesting things with the above figures. He determined the aggregate age of the members to be 64,963 years, the average age being 46.37, the median age 47.39, and the modal age (the age containing the largest number of members) 42.51. Perhaps it should be mentioned here that Dr. Nichols is thoroughly at home with statistics, especially those of the life insurance variety. This is readily explained by the fact that for many years he was Medical Director of Acacia Life Insurance Company and is now serving in an emeritus capacity.

It is the modal age which intrigues your Observer. It will be noted that the largest number of physicians are in the 40–44 age group, and that in the bracket 50–54 the figure drops sharply until the 65–69 age group is reached, when the number has been reduced from 271 to 42. There is a surprising increase in the 70 plus age group, which suggests that those physicians who survived the hazards of early and late middle age have lasting qualities which many of their younger colleagues lacked.

Your Observer is no statistician. Of necessity he works with figures, but they bore him. Infrequently, as in this instance, they are sufficiently intriguing to stimulate his interest. It seems to him that the above analysis reveals that the life span of the Washington physician is pretty much the same as that of physicians everywhere. The 65–69 period is the most hazardous, and if a physician survives those years, he will join the growing group of oldsters, many of whom go on living far past the Biblical three score and ten.

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Tomorrow's Physician

There is no subject of greater interest to the young physician nor one about which he has more misgivings than the future of his profession. What will medical practice be like in the next ten or fifteen years? Will private practice survive the social changes now in progress? Will the opportunities for advancement be as great as in the past?

In his more confident moments your Observer has not hesitated to express his views on these matters, realizing full well that time may prove him a poor prophet. His opinions have one virtue, however; they are based on many years of observation and experience.

Early in April your Observer spoke to the senior class of a Washington medical school. In the course of his comments, he said:

> "Whether people are conscious of it or not, there is a widespread feeling of insecurity. This feeling is not confined to any one occupation nor to persons of any one economic status. No matter how fortunately situated the individual may be, or how secure his position, he displays a deep concern about the future. Physicians are no exception, for they too give evidence of anxiety.
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> "There are, of course, no absolute certainties in a society as unstable as ours, but I feel that one can safely draw a few conclusions about the future from what has already occurred. Here are mine in so far as medicine is concerned:
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> (1) Private practice will survive for physicians who are best qualified professionally and for those who prefer it;
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> (2) Unquestionably, the number of physicians who enter group practice will increase; and
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> (3) Experimentation with prepaid medical care plans will continue. One can only speculate as to their final form; however, it seems certain that such plans will survive and will serve a large proportion of the popula-

tion, providing physicians exercise the leadership they should. Failing this, they will invite Government interference."

Well, this is only one man's point of view. Dr. Robert Collier Page, in an article, "The Doctor for Tomorrow's Needs," appearing in *The Journal of Medical Education* for March, 1952 sees the future of medical practice in different perspective. He says:

"The ideal medical doctor of the future will be closer to the old-fashioned general practitioner than most of us realize. He will be the doctor whose intimate association with the family as a whole has fitted him for taking care of everything from delivery of a child through a diagnosis of grandmother's complaints.

"He will be an exponent of preventive medicine and will have strong opinions on public health. His major concern will be to look upon a patient as a 'whole human being.' He will try to understand what, to the layman, appears easy to understand; namely, normal health."

* * * *

"I would like to see the term 'constructive medicine' (as adopted by Stieglitz*) gain widespread use because I believe it implies something more than what is included under the term 'preventive medicine' and that is the objective of making the individual and his environment as compatible as possible, with respect to general happiness and morale, as well as his actual physical health. . . ."

"Constructive medicine must be quick to use valuable new tools and ideas. This means that doctors of tomorrow must have flexible minds. Unless we limit ourselves to research in a special field, we must be careful to avoid the development of compartmentalized minds. We will be called upon to be sociologists, psychologists, economists, and business men as well as physicians. It is only by combining the necessary features of each that we will do our job well. First we will be physicians, of course, but the good physician has always made an effort to understand the environment in which his patients live.

"It has never been enough for any doctor to confine himself to the content of textbooks of medicine. At the present time we are more aware than ever that artificial barriers to thought must be broken down, not only within the science of medicine itself, but also where they tend to isolate medicine from related arts and sciences. The ultimate goal, after all, is, as Myerson stated it, 'to understand man,' and the doctor of tomorrow must be equipped to pursue the study of man. In time, many diseases now considered as disease entities will be included in 'physiologic changes compatible with age.' More and more people will be considered 'normal.' What a tremendous effect this will have upon the general morale! No doubt the pharmaceutical branch of the family will find a more constructive outlook, with decreasing emphasis upon the curative aspects of disease."

"In and Out of Focus" *will be discontinued during the summer months. It will make its reappearance in the September issue.*

T. W.

MEMBERSHIP

The following applicants for membership will be voted on at the meeting of the Executive Board, June 23, 1952.

For Active Membership

James E. Boyland, Georgetown University—1947
Catherine W. Blumberg, George Washington University—1934
Herbert J. Friedel, New York University—1946
Edna Myers Jeffreys, University of Tennessee—1934
William F. Kellow, Georgetown University—1946
John J. Leahy, University of Louisville—1947
Mor James McCarthy, Georgetown University—1947
Georges F. McCormick, Georgetown University—1946
John O. Nestor, Georgetown University—1940
John F. Stapleton, Georgetown University—1945
Arthur B. Wein, Boston University—1939
Frank E. Wilson, University of Tennessee—1933
Allen Zellis, George Washington University—1941

For Associate Membership

Sarah Cook, University of Maryland—1945
Murray Grossan, University of Georgia—1948
C. Albert Hudson, University of Virginia—1945
Alec Levin, Temple University—1937
Norman B. McCullough, University of Chicago—1944
Jocelyn R. Newfeld, University of Manitoba—1946
Bernard F. Peacock, Georgetown University—1950
Jorge G. Ramirez, Georgetown University—1934
William R. Stecher, Jefferson Medical College—1929

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* Dr. Edward J. Stieglitz, a member of the District Medical Society, widely known for his work in geriatrics.

SPECIAL REPORT OF THE EXECUTIVE BOARD*

The final report of your Board will be made at the Annual Business Meeting on May 7. This report contains only one item on which action should be taken. Several other matters are discussed briefly for your information.

Regulations for the Guidance of Physicians Engaged in Practice under the Workmen's Compensation Law with Appended Fee Schedule: The Society's Committee on Industrial Medicine has been in the process of revising the Regulations and Fee Schedule for many months. It should not be necessary to emphasize that considerable time and effort were devoted to the preparation of this material. Your Board wishes to commend the Committee for its work and particularly Dr. W. Cabell Moore, Chairman of the Committee, for his tireless efforts to develop a fee schedule satisfactory to the doctors and the insurance companies.

Early in the deliberations between the Committee and the insurance companies differences arose regarding fees for the first office visit and follow-up visits. A compromise was finally reached though a minority of the Committee wished it understood that they did not concur.

Your Board voted to recommend that the new Regulations and Fee Schedule be approved by the Society and that a mail vote of the membership be authorized. If this recommendation is approved a copy of the Regulations and Fee Schedule will be mailed to each member with a covering letter reviewing the Committee's actions and setting forth the viewpoint of the minority.

Adoption of Amendment XXII to the Constitution and By-laws Proposed: Your Board and the Society's Grievance Committee have on occasion been criticized for failure to take action against a member whose conduct has been the subject of adverse comment both in the newspapers and among the profession and public generally. Specifically, your Board refers to situations whereby a member may be under criminal indictment or arrested for gross misbehavior. Though there have been only a few such cases, your Board has long been of the opinion that the Constitution and By-laws should provide for the suspension of such a member until a determination has been made with regard to his guilt.

It will be noted that in the following amendment none of the Society's prerogatives have been abrogated. The only purpose of the Amendment is to provide a mechanism by which the Society can protect its good name and that of its members.

This Amendment is presented tonight for the first time and will not be submitted for action by the Society until May 7. It reads:

AMENDMENT XXII

Amendment XI of the Constitution and By-laws is hereby amended by the addition thereto of the following:

Section 3. Should any member of the Society be charged by any competent authority with the commission of a crime involving moral turpitude, or should any member be charged in writing with gross misconduct or gross violation of the duties, obligations and regulations imposed upon that member by the Constitution and By-laws of this Society, the Grievance Committee may report thereon to the Executive Board of the Society and may recommend the suspension of all privileges of such member until the determination of such charge or charges, provided that the Grievance Committee shall first determine and report to the Executive Board that such suspension is in the best interests of the Society.

The Executive Board, on receipt of a recommendation from the Grievance Committee for suspension of a member may, by a vote of two-thirds of the full membership of the Board, vote to suspend the privileges of such a member until the charge or charges against such a member is or are determined, if the Executive Board concurs in the recommendation of the Grievance Committee and determines that such suspension is in the best interests of the Society.

Should the charged member be found not guilty of such charge of crime, or should the charge terminate in his favor, without a conviction, or where charges are brought against a member under this Constitution and By-laws, should such charges be determined in favor of such member, then the Executive Board shall promptly revoke its action suspending the privileges of such member and shall restore all membership privileges to such member.

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* Adopted at a special business session of the Medical Society of the District of Columbia, April 16, 1952.

On conviction of a member of a crime involving moral turpitude, or should such member be found guilty of charges brought as aforesaid under the Constitution and By-laws of the Society, then the Executive Board shall have the power to continue such suspension permanently or for a lesser period, in addition to any other disciplinary action which may be taken by the Board under Chapter VIII of the Constitution and By-laws. The right of appeal of any member from such final decision of the Executive Board as provided in Chapter VIII of the Constitution and By-laws shall remain inviolate.

Relations with the Press: This portion of your Board's report is purely informative.

In your Board's opinion the Society has had very satisfactory relations with the press during recent years. One reason for this is the common-sense approach to this matter by the Committee on Public Relations.

Recently the Committee reviewed the General Recommendations Governing Members of the Medical Society of the District of Columbia in Their Relations with the Public and with Lay Publications and decided that no changes should be made. However, it voted that a copy of the Recommendations be sent again to the entire membership. It is hoped that all members will read these carefully.

The Committee recently revamped its list of physicians in the various specialties and general practice which is furnished city editors of the Washington newspapers for the purpose of aiding reporters in verifying the facts contained in scientific news stories. For the past four or five years similar lists have been provided city editors, who have expressed their satisfaction on a number of occasions with the coöperation given them by the Society. In the opinion of your Board every possible assistance should be given newpsapers where medical news coverage is concerned.

Your Board met with the editors and managing editors of Washington newspapers in the early part of this year. Some of the problems confronting the medical profession in Washington were discussed at length and with utmost frankness. Everyone seemed pleased with the better understanding which resulted.

Conclusion: A week or ten days before the Annual Business Meeting members will receive a copy of Reports of Officers, the Executive Board and the Board of Censors for 1951–52. That report will be acted on at the above meeting and your Board urges you and all members to read the reports carefully.

Respectfully submitted,
Raymond T. Holden, M.D., *Chairman*
William M. Ballinger, M.D.
Frank D. Costenbader, M.D.
Walter Freeman, M.D.
John Minor, M.D.
Herbert P. Ramsey, M.D.
Wallace M. Yater, M.D.
Theodore Wiprud, *Secretary*

MEDICAL DIRECTORS WANTED FOR CIVIL DEFENSE

The Federal Civil Defense Administration's regional offices are authorized to employ full-time medical directors to handle medical civil defense problems arising within such regional geographical areas. To date the FCDA has encountered difficulty locating physicians qualified and willing to accept these positions. In view of the urgency for hiring these medical directors at the earliest possible date, the Council on National Emergency Medical Service of the AMA is attempting to assist in locating qualified individuals.

The position pays $10,800 per year. There are nine civil defense regions with regional offices located in strategic cities. The following list shows where the regional offices are located and the states serviced by each office:

Region 1—Boston, Mass.: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Delaware
Region 2—Richmond, Va.: Pennsylvania, Maryland, Virginia, West Virginia, North Carolina
Region 3—Atlanta, Ga.: Tennessee, Mississippi, Alabama, Georgia, South Carolina, Florida
Region 4—Cleveland, Ohio: Ohio, Kentucky, Michigan
Region 5—Chicago, Ill.: Wisconsin, Illinois, Indiana, Iowa, Minnesota, North Dakota, South Dakota
Region 6—Dallas, Texas: Oklahoma, Arkansas, Louisiana, Texas
Region 7—Denver, Colo.: Wyoming, Nebraska, Kansas, Colorado, New Mexico, Missouri
Region 8—San Francisco, Calif.: California, Nevada, Utah, Arizona
Region 9—Seattle, Wash.: Washington, Montana, Oregon, Idaho

The following excerpts are from the official job description which was sent to the Editorial Offices of the MEDICAL ANNALS:

"Under general administrative direction of the Regional Director, GS-301-15-161, and the technical guidance provided by the Health and Special Weapons Defense Division, serves as the Medical Officer assigned to a FCDA Regional Office. Is responsible for providing advice, guidance, assistance and direction to the several states within a designated geographical region and through them their political subdivisions, as regards planning, developing and administering of a program designed to provide health and special weapons defense services to the civilian population during or in the aftermath of enemy attacks."

* * * *

"The incumbent of this position should be a man of broad and diversified medical and public health background. His work experience should indicate executive and administrative competence. His experience should conclusively demonstrate ability to carry out difficult and highly important assignments. Within the medical and public health fields, he should be well known and respected and enjoy the confidence of his professional associates. His background should indicate that he possesses an adequate understanding and appreciation of the basic administrative problems and principles underlying the relationships between the Federal and state governments.

"He should be able to work well with other key officials in the regional office in order to coordinate and integrate his program so as to enable the Regional Director to accomplish the over-all purpose and intent of the Federal Civil Defense Act of 1950. He should possess the ability and personality to work and coöperate with other key persons in state and local civil defense efforts.

"Incumbent should be a qualified member of the medical profession.

"It is desirable, but not required, that incumbent be well acquainted with the people, environment, and medical and health problems found within the regional area to which assigned."

Any physician interested in obtaining one of these medical directorships should write to Mr. C. Joseph Stetler, Secretary of the Council on National Emergency Medical Service, AMA, 535 North Dearborn Street, Chicago 10, Illinois.

GROUP HOSPITALIZATION REËLECTS OFFICERS

Joseph H. Himes, President of Group Hospitalization, Inc., was reëlected President for the 19th consecutive year at the annual meeting of the Board of Trustees in the Washington Hotel, March 28.

Mr. Himes, whose efforts resulted in the establishment of the committee of community leaders who organized Group Hospitalization, Inc. in 1933, has served the hospital prepayment plan as President continuously. In point of service, he is the country's senior Blue Cross executive.

Other officers were also reëlected. They are: A. G. Neal, Chairman of the Board of Potomac Electric Power Company, First Vice President; Charles D. Drayton, trustee of Children's Hospital, Second Vice President; Bruce Baird, President of the National Savings and Trust Company, Treasurer; and Dr. Walter A. Bloedorn, Dean of the George Washington University School of Medicine, Secretary.

There are two new members of the Board, Dr. Howard P. Parker, named by the Medical Society of the District of Columbia to succeed Dr. Oscar B. Hunter, Sr., deceased, and James H. Lemon, named by the Plan's participating hospitals.

At the meeting it was reported that the enrollment of Group Hospitalization had reached an all-time high of 518,833 participants. Enrollment increased during each of the three months following the announcement of revised benefits last December.

Mr. Himes, as a pioneer in the voluntary prepayment movement, recalled that during the early days of Group Hospitalization many individuals were skeptical that the Plan could survive. "Each year they expressed the opinion that while we had accomplished more than they had expected, the movement probably had reached its limit in service. They were asking, 'Well, where are you going from here?' Group Hospitalization has answered that question. Despite the limited area Group Hospitalization serves, the Plan now stands 22nd in size among the 87 Blue Cross Plans and ranks fourth in percentage of population enrolled. In 1951, the net increase in number of participants was 45,805 making it the second best enrollment year in GHI's history, being exceeded only by 1946."

During 1951 Group Hospitalization incurred hospital claims for services rendered to participants amounting to $5,413,704. There were 67,553 hospital admissions. Incurred expense for hospitalization in 1951 exceeded that of 1950 by $605,552.

Concerning Those Who Work with Us

PHARMACY

THE PHYSICIAN-PHARMACIST RELATIONSHIP

F. Royce Franzoni, B.S.

President, District of Columbia Pharmaceutical Association

Mutual problems of the physician and the pharmacist revolve primarily around their joint relationship to the third party of the medical-care triangle, the patient. Most of the problems are more vexing than breaching and are more the result of misunderstandings than of deliberate violations of interprofessional confidences and relationships. Regardless of interprofessional attitudes, both professions must present a sympathetic and united front to the patient they serve. The medium through which both professions meet and assist the patient's health and welfare is the prescription, and it is this paper and its mystic symbols which give rise to the bulk of our problems. With the aim of better understanding, these words are directed to the pharmacist's staunchest supporter and ally, the physician.

Prescription problems may be grouped into three classes, economic, legal, and medical. A discussion of the problems, in each of these classes, should materially assist interprofessional understanding and promote the mutual coöperation so essential to the well-being of the patient. Consequently, I am taking the liberty of making a few statements under each heading to stimulate the physician's thinking about these every-day problems. These statements are based on fact, practice and the law; they could be enlarged much beyond the scope of this writing, if space permitted.

Prescription Economics

In addition to the investment in the commodity lines which stock his drugstore, the average modern prescription department represents an inventory investment of from $8,000 to as high as $15,000. Much of this inventory is made necessary by the relatively high cost of our modern therapeutic agents, the antibiotics, biologicals, parenterals and specific medications; and the pharmacist who would adequately serve both the physician and the patient has no choice but to be prepared to dispense all of the drugs which are requested. In a free enterprise system of medication, many pharmaceutical manufacturers have processed new drugs of great merit after costly research work; but, riding upon the results of their efforts are a myriad of parallel and duplicate preparations which the pharmacist must carry in stock if he is to meet all the demands of high-pressure promotions and detailing to the physician. Were all these preparations different, the pharmacist would be quite happy to carry adequate and comprehensive supplies; but consider his plight when he is "forced" (by prescription specificity) to carry several to a dozen manufacturers' brands of protein hydrolysates, of sulfa-drug combinations, of penicillin dosages, of phenobarbital-belladonna mixtures, and of barbiturate specialties. He often has to buy in units of 100 or more doses in order to dispense 12 or 24; and the sight of partially-full bottles remaining upon his shelves as the physician tries the "latest" detailed drug is a most sore one because of the economic loss. A little leeway in the choice of manufacturer (provided one of high standing is chosen) or the writing of drugs under their official U.S.P. or N.F. or N.N.R. generic names would help him to reduce his inventory and to provide excellent medication at an over-all lower cost to the patient. Pride of the pharmacist in his profession and in his personal reputation is the physician's best guarantee that drugs dispensed under the generic rather than the "specialty" name will meet all standards of purity and potency.

Also associated with the economics of the prescription is the final price to the patient. While the physician should never attempt to control the professional fee charged to the patient by the pharmacist any more than the pharmacist should comment on the physician's fees, a judicious statement of the cost of the prescription might prevent considerable misunderstanding when the prescription is delivered.

The physician, through his general knowledge of drug costs, can often prepare the patient for procurement of a drug and can ethically indicate whether the drug is costly, average, or relatively inexpensive.

Finally, the physician should allow the patient a relatively free choice in selection of his pharmacist. Coded or "private formula" prescriptions not only result occasionally in overcharges to the patient and a restriction to the patient's convenience in having the prescription compounded, but they often cause the patient to suspect a tie-in between the professions that is to his financial disadvantage.

Prescription Laws and Regulations

The past few months have witnessed many discussions of the changes in established prescription practices which will result when the Humphrey-Durham Amendment becomes operative on April 26. With these new regulations many of the finer relationships between the physician, the pharmacist and the patient will be sorely strained until all understand the legal requirements of the new law and its regulations. Prescriptions which had previously been renewed with tacit approval of the physician must be reauthorized before they can be dispensed at the patient's request; the injectable drugs which the physician had been instructing the patient to get "over the counter" will now require a written prescription; and the pharmacist who previously had an understanding with his physician-friend about the refill of barbiturate or dangerous-drug prescriptions will now have to secure a specific authorization for the refill and note it on the prescription. If each of the professional partners in the patient's welfare do not coöperate in meeting these legal requirements, the patient may easily assume that it is a new idea to obtain an additional professional service fee. Most of the new requirements have been explained through the medium of pharmaceutical and medical journals, but points of difficulty may still arise. Should your pharmacist call about the refill of a prescription, make sure that your secretary or nurse permits him to reach you; and if your practice is to allow your office employee to authorize medication in your name, make sure that the pharmacist is aware of this authorization. It is just as inconvenient for the pharmacist to check on the refill authorization as it is for you to interrupt your practice to take his call. Better yet, a specific instruction on the prescription itself as to the number of refills or to the time limit for refilling will materially assist the dispensing of your prescribed medication to the patient and will reduce the number of phone calls to your office.

Nothing in the new law changes the legal requirements for narcotic-drug prescriptions; they must contain the patient's name and address, your name and address and registry number, and they must be dated and signed. Narcotic prescriptions may be accepted over the telephone only in an emergency, and the regular, signed prescription must be waiting when the prescription is delivered to the patient's home. A refill of a narcotic prescription must be written out in full (not just 'refill ℞ # ———') and must be proferred in advance of dispensing, since the refill cannot be construed as an "emergency."

In any event, where there is a question as to a prescription, either as to its legality or as to its content or meaning, consult willingly with the pharmacist; he will protect your confidence and will serve the patient to the best possible advantage. Mutual coöperation will prevent many misunderstandings and insure a smooth, friendly and confident relationship between the patient, the pharmacist, and the doctor.

Prescription Service

Under this heading might be discussed all of the problems of the prescription not involving economics or law: the changes or modifications needed to present an elegant, efficacious medicine; the suggestion to the physician or pharmacist of accessories needed with the medication; the careful counter-check on questionable dosages or combinations; and the suggestion for alternate medications or combinations when the drugs requested might not be readily obtainable. It is in this field that the greatest opportunity lies for the pharmacist and the physician to exchange confidence and trust.

The mutual benefit should be apparent, and the patient will be benefited also. The pharmacists of the District of Columbia invite your inquiry, your suggestions and your comments about their professional practice and their services to your patients and to yourself. Through your understanding of some of their problems and their understanding of yours much in the interest of a sound professional relationship in the public service can be accomplished. Let's do it!

News and Personals

The 101st Annual Session of the American Medical Association will be held in Chicago, Illinois, June 9–13, 1952. Delegates from the Medical Society of the District of Columbia will be Drs. Herbert P. Ramsey and Hugh H. Hussey. Dr. Frank D. Costenbader, President, and Theodore Wiprud, Secretary, will also represent the Medical Society at the AMA Convention.

The American Academy of Pediatrics is holding an Areal Meeting at the Hotel Statler, Washington, May 22–24.

A meeting on civil defense, sponsored jointly by the Health Department of the District of Columbia, the D. C. Office of Civil Defense, and the Medical Society of the District of Columbia, will be held in the Medical Society's auditorium on Tuesday, June 3, at 8 p.m. The principal speaker will be **Sir Allen Daley, F.R.C.P.,** former Director of Health for the City of London. The subject of his address will be "London During the Blitz." This renowned physician was knighted for his outstanding work during that crisis.

The 1952 session of the Southern Pediatric Seminar will be held in Saluda, North Carolina, July 14–26. This is the 31st annual session of this institution, which has become one of the outstanding postgraduate courses in pediatrics in the country. Following the plan which was put into effect last year, there will be an additional week (July 28–August 2) devoted to the study of obstetric and gynecologic problems.

The Seminar was established and is maintained for the benefit of the general practitioner. Outstanding teachers and clinicians from the various southern states come at their own expense to give lectures, clinics, clinico-pathologic conferences and demonstrations. The meetings are of an informal nature and there is ample time to present special subjects and questions for discussion.

Saluda is in the mountains of North Carolina and many of the physicians bring their wives and families with them, making the occasion a joint period of study and vacation. Such a plan is encouraged by the leaders of the Seminar and every effort will be made to secure accommodations for those who might desire to do this.

Those who wish further information should write to Dr. D. L. Smith, Registrar, 187 Oakland Avenue, Spartanburg, S. C.

The University of Pittsburgh School of Medicine announces a **Postgraduate Symposium on the Basic Sciences Related to Anesthesiology** in coöperation with the Departments of the St. Francis, Allegheny General, and Mercy Hospitals, to be held in Pittsburgh, June 2–6, 1952. The registration fee is $25.00. The course will be limited to 50 participants. Full particulars of the Symposium may be obtained from the Chairman of the Committee on Graduate Medical Education, University of Pittsburgh School of Medicine, 3941 O'Hara Street, Pittsburgh 13, Penna. Hotel reservations should be made with the Hotel Schenley, 5th Avenue and Bigelow Boulevard, Pittsburgh 13, Penna.

The Society for the Prevention of Asphyxial Death, Inc. is beginning its sixth year of sponsorship of courses in resuscitation. The course is given regularly at the Society's headquarters in New York City the first Friday and Saturday of each month. Out-of-town classes have been held in a number of cities including Washington, D. C. Requests for out-of-town courses will be considered where application is made by a group of at least 12 students. Instruction stresses the elimination of the death zone of the respiratory tract through lectures, demonstrations and clinical practice in laryngoscopy and intubation of dogs and cadaver.

Viewed from the over-all field of medical education, the Society is cognizant that this is but a pilot project. To date only 544 students have participated,

CALENDAR OF MEETINGS, MARCH 16–APRIL 15

March 18	Grievance Committee
	Subcommittee on Mental Health
	Section on General Practice
	Lay Society, Diabetes Association of D.C.
March 19	Health Section, United Community Services
March 20	Hospital Committee for Civil Defense
March 21	Committee on Medical Ethics and Deportment
	Committee on Industrial Medicine
	Section on Radiology
March 22	Washington Psychiatric Society
March 24	Executive Board
	D. C. Society of Anesthesiologists
March 25	Health Section, United Community Services
March 29	D. C. Rheumatism Society
March 31	Committee on Scientific Exhibits, Annual Scientific Assembly
	Committee on Teaching Technics
April 1	Grievance Committee
April 2	Executive Board, Woman's Auxiliary
	Planning Group for D. C. Survey on Medical Care for the Indigent
April 3	Committee on Public Health Exhibit, ASA
	Section on Neurology and Psychiatry
	Executive Committee, Gallinger Hospital
April 4	Conference on Medical Teaching Technics
April 5	Conference on Medical Teaching Technics
April 8	Committee on Attendance, ASA
	Committee on Care of Indigents
April 9	Woman's Auxiliary
	Washington Psychiatric Society
April 10	Committee on Radio, TV and Motion Pictures, ASA
April 12	Washington Psychoanalytic Society
April 14	Section on Ophthalmology
April 15	Lay Society, Diabetes Association of D. C.

of which 45 were Naval officers, 11 came from the Army, Air Force and USPHS, and 430 were physicians and oral surgeons representing 20 specialties. The Society hopes that medical and dental schools over the country will shortly provide this integrated information, making it a commonplace in graduate instruction.

The Society has the approval of the American Medical Association. Dr. Chevalier Jackson, Philadelphia, is chairman of its Advisory Board, whose membership includes the Surgeons General of the Army, Navy, Air Force, and Public Health Service.

Information regarding the Society or its courses of instruction may be obtained by writing to the Secretary, Dr. E. H. Zabriskie, Secretary of S.P.A.D., 2 East 63rd Street, New York 21, New York.

The Washington Psychiatric Society is sponsoring an **essay contest** for physicians in psychiatric residency training in the Washington Metropolitan Area. First prize will be a cash award of $100 for the best paper submitted. Certificates of merit will also be awarded. The paper must not exceed 6,000 words in length and may be on any subject in psychiatry or a closely related field. The deadline is February 1, 1953. Dr. Seymour J. Rosenberg, Secretary of the Society, will be glad to furnish any further information regarding the contest. Winners of the awards will be invited to present their papers before the Society.

The name of The Association for the Advancement of Exceptional Children of the Metropolitan Area of Washington, D. C., Inc. has been changed to **Help for Retarded Children, Inc.**

The Armed Forces Institute of Pathology, formerly the Army Medical Museum, will open an exhibit tracing 90 years of its history on May 21, the anniversary of its birth, in the Medical Museum at 9th and Independence Avenue, S.W. The exhibit will remain on display for six months.

A replica of the old Museum will depict the days of Lincoln when Surgeon John H. Brinton, the first Curator, toured the battlefields of the Civil War to collect material for the Museum and the medical history of the War, and Surgeon J. J. Woodward, who performed the autopsies on the martyred President and his assassin, became famous for his work in photomicrography.

Also on display will be relics of Major Walter Reed, who was Curator of the Army Medical Museum when he engaged in his work on yellow fever, and Major F. F. Russell (now Brigadier General, retired) who gave the first immunizing injections in the Army against typhoid fever to volunteers from the Museum staff.

Other exhibits will show: developments in medical illustration through the years; the American Registry of Pathology, which plays an important role in both military and civilian medicine; modern museum technics; and present-day laboratory methods.

The 382nd General Hospital in Osaka, Japan, marked its first anniversary, March 17, after a full year of caring for thousands of casualties from the Korea combat zones.

Colonel Raymond Maret, Commanding Officer, has headed the hospital since its activation in Washington, D. C., March 1948, as an organized reserve evacuation hospital. The original nucleus of Washington physicians, nurses, dentists and Government employees was augmented by 400 qualified reservists when called to active duty in September 1950.

The unit participated in maneuvers at Fort Meade, Maryland, in 1949, supplementing the services of the Army hospital at the station. In 1950 it furnished medical support for the 28th Infantry Division, Pennsylvania National Guard.

When called to active duty, the 382nd was designated a general hospital, so that highly trained personnel could be utilized to the best advantage. It moved to Fort Lewis, Washington, for further training.

In January, 1951 the 382nd General Hospital departed from Seattle and two weeks later arrived at its present station near Osaka. On March 17, 1951, the 382nd began operations and since that time has maintained a steady pace in caring for battle casualties from Korea.

In addition to Colonel Maret, several other members of the Medical Society are serving on the medical staff of the 382nd Hospital. They are: Lt. Colonel Karl C. Corley, Lt. Colonel Richard L. Jackson, Major Brooks G. Brown, Major Clarence L. Hartman, Major Charles F. Steigler, Captain Merton T. Waite, Captain Joseph H. Watson, and Captain Raymond J. Winfield.

Two Society members who were on the staff of the 382nd have been reassigned to other units. They are Major Joseph W. Cooch and Captain Avrohm Jacobson. The latter is now Chief of the Neuropsychiatric Service of the 141st General Hospital Major Cooch is with the 8000 A.U. Logistical Command.

The U. S. Department of Defense has accepted 108 senior medical students, who will graduate from various medical colleges and schools throughout the United States in 1952, for intern training at Naval Hospitals beginning July 1, 1952 under the Navy's Graduate Medical Training Program. The students will be appointed Lieutenants (junior grade) in the Medical Corps, Naval Reserve, following graduation and will then be ordered into the active military service and assigned to Naval hospitals approved for intern training by the AMA's Council on Medical Education and Hospitals. Among the students selected are two from Washington, D. C., Kenneth D. Crippen and Elijah White Titus, Jr. They have been assigned to Naval hospitals in San Diego, Calif., and Philadelphia, Penna., respectively, for their intern training.

Dr. Addison M. Duval, Chief of Staff, **and Dr. Manson R. Pettit,** Chief of Service, both of St. Elizabeths Hospital, are on the staff of the **first psychiatric clinic especially set up for Washington school children.** The clinic is sponsored by the Kiwanis Club of Eastern Branch, D. C. and will service Anacostia High School, and the Sousa and Kramer Junior High Schools. It is intended to provide complete psychiatric examination and treatment services to those pupils needing such care and whose parents cannot afford the expenses. Each staff member will donate his time and skill as a community service. Pupils requiring specific study or treatment beyond the scope of the clinic will be referred to appropriate public or private medical facilities, the payment for which will be assumed by the Kiwanis Club. The twice-monthly clinic sessions have been under way at the Anacostia School dispensary since mid-January.

Dr. Duval believes this is the first child psychiatric clinic to be sponsored by any Kiwanis Club. Announcement of the project was made jointly by Dr. Duval, Clarence McCune, President of the Club, and Dr. Otis R. Farley, Chairman of the Clinic Committee of the Club.

Doctors Hospital announces that it is relaxing its **rules for visiting hours.** Visitors will be admitted to all floors and rooms between 11 a.m. and 9 p.m. with the usual restrictions for children under 12. Special regulations will apply to maternity patients. Visitors will not be allowed on obstetrical floors during infant feeding hours, 1:30 and 2:30 p.m. and between 5:30 and 6:30 p.m., and only two visitors will be allowed to call on a maternity patient at one time.

Graduates of Harvard Medical School in the Washington Area have formed a **Harvard Medical Alumni Society of Washington.** The organizational meeting was held at the home of Dr. Sydney Ross on January 26, 1952. Dr. Charles A. Hufnagel presented a paper on "Recent Advances in Cardiovascular Surgery" and Dr. Calvin T. Klopp discussed "Some Aspects of Current Cancer Research." The following officers were elected:

Dr. Ross, *President;* Dr. Frank G. MacMurray, *Secrctary-Treasurer;* Dr. Hufnagel, *Program Chairman.*

The George Washington University Hospital has opened a **Radioisotope Laboratory** for research and therapy of cancer and related diseases. This laboratory has been approved by the Atomic Energy Commission for work with radioactive iodine, phosphorus and gold. It is under the direction of Dr. Louis K. Alpert, Adjunct Clinical Professor of Medicine, with the assistance of Dr. Adolf A. Friedman, Clinical Instructor in Medicine, and is being supported in large part by a grant from the Damon Runyon Memorial Fund for Cancer Research. Although the research activities will be directed toward the treatment of malignant diseases, the facilities will be utilized to a limited extent for the determination of thyroid function in nonmalignant states.

The Washington Society of Pathologists held its regular meeting at the Army Medical Service Graduate School of Walter Reed Army Medical Center, April 3. The following program was presented: "Carcinoma of the Female Urethra" (case presentation), Cdr. J. A. Turner, MC, USN; "Hyalin Membrane Associated with Liver Changes in Intrauterine Anoxia," Major Roberto E. Benitez, MC, USA; and "Tumors of Parathyroid," Lt. Cdr. Boyd Black, MC, USN.

The following officers were elected for 1952–53:

Lt. Colonel Colin F. VonderBruegge, *President;* Dr. Kenneth L. McCoy, *Vice President;* Dr. John S. Howe, *Secretary-Treasurer.*

The Washington Academy of Surgery held a dinner meeting at the Kennedy Warren, April 14. Dr. Edward D. Churchill, John Homans Professor of Surgery, Harvard University, was the guest speaker. He spoke on "Current Problems in Surgical Training."

The Annual Banquet of the Clinico-Pathological Society was held on April 8 at the Chevy Chase Club. The speaker for the occasion was Dr. Paul B. Magnuson, Chairman of the President's Commission on the Nation's Health. For his subject Dr. Magnuson used "Some Rambling Observations on the Nation's Health."

The George Washington University Medical Society held its fifth meeting of the season on March 19. Dr. Waldo E. Nelson, Professor of Pediatrics, Temple University School of Medicine, Philadelphia, was present to speak on "Respiratory Problems of the Newborn."

On April 16 Dr. Garfield G. Duncan, Professor of Medicine, Jefferson Medical College, Philadelphia, addressed the Society on "Highlights in the Management of Diabetes."

Dr. Glen Pincock was host to the **Section on Gastroenterology** on May 12. Dr. Harry M. Eberhard, First Vice President of the National Gastroenterological Association, gave the principal address. Dr. Eberhard is also Professor Emeritus of Gastroenterology of Hahnemann Medical College, Philadelphia.

The Alexandria Medical Society held its **Third Annual Clinic Day** on Sunday, April 27, in the Bendall Alexandrian Room in Alexandria, Va. Papers were presented by members of the faculty of the

University of Maryland. Members of the Medical Society of the District of Columbia were invited to attend and a number of them were present.

Dr. Melvin Casberg succeeded Dr. W. Randolph Lovelace II as **Chairman of the Armed Forces Medical Policy Council** in the Department of Defense, April 1. Dr. Casberg has been Vice Chairman of the Council since the first of the year. He is a veteran of World War II, having seen service in North Africa and China, and was Dean of St. Louis University School of Medicine at the time of his appointment to the Council.

Dr. Edwin L. Crosby, Director of the Johns Hopkins Hospital, Baltimore, has been named Director of the recently organized **Joint Commission on the Accreditation of Hospitals,** which will inspect and approve hospitals of North America. The Commission was organized by the American Medical Association, American Hospital Association, American College of Surgeons, American College of Physicians, and the Canadian Medical Association. Accreditation has been a function of the American College of Surgeons for the last 34 years. Dr. Crosby, who is President-elect of the American Hospital Association, will assume his new duties on September 1.

A new **Executive Secretary for the Hospital Council of the National Capital Area, William M. Bucher,** replaces Henry D. Hamilton, who resigned on March 1 to become Business Manager of the Delaware General Hospital in Wilmington, Delaware. Mr. Bucher, who studied hospital administration at the University of Virginia, has been administrative assistant at Winchester, Va., Memorial Hospital since last July.

At the meeting of the **Executive Board of the Medical Society of the District of Columbia,** March 24, Dr. Frederick C. Fishback was authorized to appear before the District Commissioners in regard to the Pound Law as the official representative of the Medical Society.

Confirmation was given to the following appointments, submitted by President Costenbader, to the Medical Advisory Committee to the Laborers' Union: Drs. Philip A. Caulfield, Clayton B. Ethridge, George R. Farrell, Clarence K. Fraser, Herbert S. Gates, Emil J. C. Hildenbrand, Zigmond M. Lebensohn and M. Noel Stow.

The Office of Civil Defense of the Government of the District of Columbia has announced the appointment of Dr. Alfred E. Brigulio as Coordinator for Medical Care Services. Dr. Brigulio succeeds to the post held by Dr. Oscar B. Hunter, Sr. at the time of his death.

Dr. Luther W. Gray has received two new assignments in the Civil Defense set-up, Deputy Coordinator for Medical Care Services, replacing Dr. W. Ross Morris, who resigned, and Chief of Medical Resources Services, replacing Dr. A. Clagett Gray, who resigned. The position of Deputy Chief, Medical Resources Services, formerly held by Dr. Luther W. Gray, will be assumed by F. Royce Franzoni, President of the D. C. Pharmaceutical Association.

Emergency Hospital was host to its Executive Committee, March 31, when the members inspected the new, modern laboratory which has just been completed at a cost of $82,000. The laboratory is located on the first two floors of 1712 F Street, N.W., at the rear of the main building. Dr. Frank W. Konzelmann, pathologist, is in charge.

The laboratory provides extensive work areas and latest equipment for special tests of body fluids and tissues. It facilitates routine laboratory tests required of every patient and, under Dr. Konzelmann's direction, offers a complete training center in pathology for resident physicians and interns.

Eleven technicians work round-the-clock. The first floor contains office space, reception room, hematology and pathology sections. The second floor laboratories keep in constant touch with the wards, private rooms and surgical department via an enclosed corridor to the main building. On the second floor is the new spectrophotometer, a $1,700 instrument by which technicians determine accurately and quickly the composites of whole blood, serum and plasma. This is a part of the new equipment purchased for the laboratory at a cost of $10,000.

Also on the second floor is the pathology library where current domestic and foreign medical journals, as well as medical books, are available. Twice-weekly lectures for interns and residents, the showing of slides and scientific films, are scheduled.

The building which houses the new laboratory has been used for about 25 years as a dormitory for the Hospital's interns. The third floor will be used for laboratory study and storage rooms as soon as other quarters can be found for the interns who still have quarters there. The old laboratory occupied three small rooms in the main building. These rooms, which adjoin the operating suites, will be used as recovery rooms.

The Capital's Health, monthly publication of the District of Columbia Health Department, has been revived, the first issue appearing in April 1952. "We will endeavor to bring news and views of public health to the professional health workers and to the other citizens of the District of Columbia," Dr. Daniel L. Seckinger, Director of Public Health, points out in an introductory statement. The first issue, consisting of four pages, opens with an article by Dr. Philip A. E. Stebbing, Superintendent of Gallinger Municipal Hospital, on admission requirements to Gallinger. Also featured is a résumé of the work being carried on in the Department's Bureau of Cancer Control.

Mr. J. Edgar Caswell, Director of the Bureau of Public Health Education, is Editor of the publication. Dr. Seckinger acknowledges with appreciation the coöperation of Washington's medical and dental organizations which are assisting in the distribution of *The Capital's Health.*

Funds for research projects at **George Washington University School of Medicine** have been augmented recently by generous grants from four pharmaceutical houses and the Lasdon Foundation.

Dr. John P. McGovern, Assistant Professor of Pediatrics, has received a grant of $3,500 from Charles Pfizer and Company to be used for research on antibiotics, specifically to study their growth-promoting factors in premature infants, their use in cases of whooping cough, and the effectiveness of new routes of administration. Dr. McGovern will use a grant of $4,500 from White Laboratories for an evaluation of the drug, molybdenum, in compounds containing iron to determine its effectiveness in the treatment of iron deficiency anemias in infants and children. The third grant, $4,250, was awarded Dr. McGovern by the Eli Lilly Company to finance special studies on new methods of immunization against whooping cough. The research projects made possible by these new grants will be carried on at Gallinger Municipal Hospital.

Dr. McGovern joined the University staff, July 1, 1950, as a Markel Foundation Scholar in Medical Science. Under this award Dr. McGovern was granted $6,000 a year over a period of five years to support him in teaching and research. His general research interests concern diseases of infancy and childhood.

Three other teaching staff physicians at George Washington will conduct research projects in their fields of interest.

The Lasdon Foundation grant of $10,000 will be used for laboratory and clinical studies in tuberculosis. **Dr. Sol Katz,** Adjunct Clinical Professor of Medicine, **and Dr. Monroe J. Romansky,** Associate Professor of Medicine, will make studies on the effects of various drugs, including isonicotinic derivatives, streptomycin, and PAS on the tubercle bacillus in the laboratory and with patients. Tests will be made of the drugs' effectiveness singly and in combinations. **Dr. Charles S. Coakley,** Associate Professor of Anesthesiology, will study the relative effectiveness of two intravenous barbiturate anesthesia agents, made possible by a grant of $1,800 from Abbott Laboratories.

Dr. Harry Lee Claud, President-elect of the Southeastern Surgical Congress, which met in Atlanta, Ga., March 10–13, took office as President the last day of the convention. He will preside at the next meeting of the Congress, which is scheduled for March 9–12, 1953 in Louisville, Ky. Brown Hotel will be headquarters.

Other physicians from Washington who attended the recent Congress were: Drs. J. Ogle Warfield, Ernest Gould, Murray M. Copeland, J. Ross Veal, William E. Bageant and Milton C. Cobey. Drs. Bageant, Copeland and Veal presented the following papers: "Physiology of Anesthesia as Related to General Surgery," Dr. Bageant; "Intra-arterial Transfusion; Indications and Technics," Dr. Veal; and "Diagnosis and Treatment of Certain Forms of Chronic Cystic Mastitis (Breast Dysplasia)," Dr. Copeland.

Dr. R. Lomax Wells, Medical Director of the Chesapeake and Potomac Telephone Companies, has been appointed one of 35 advisers to the U. S. Public Health Service to assist in the operation of services of the Claimant Agency health and sanitation programs.

Dr. Wells, who represents the Industrial Medical Association, will be among the 21 professional consultants to the Division of Civilian Health Requirements of PHS. Fourteen are liaison representatives from trade associations dealing with materials required in the health and sanitation programs.

The Federal Security Agency, Public Health Service, under the Defense Production Act, processes all applications for critical materials used in the construction of civilian hospitals and health facilities and has responsibility for the domestic distribution of equipment and supplies needed for civilian health and sanitation activities, exclusive of those required by the VA and the Federal Civil Defense programs.

The advisers will assist the Service in estimating, presenting and justifying construction materials requirements. They also will assist the Service in appraising the effects of limitation orders, metal allocations and other controlled materials actions relating to equipment and supplies.

Dr. Donald Stubbs, President of the **Southern Society of Anesthesiologists,** delivered his Presidential Address at the opening session, April 10, of the three-day annual meeting of the Society at the Jung Hotel in New Orleans, La. Dr. Stubbs spoke on "The Relief of Human Suffering." He presided at the round table luncheon which followed the morning session and at the morning session, April 11. On the last day he discussed the paper on "Sympathetic Nerve Blocks" by Dr. Alton Ochsner of New Orleans.

Drs. Charles S. Coakley and C. Herbert Spencer, of Washington, presented a paper, April 12, on "Clinical Evaluation of Syncurine—a Two Year Study." The paper was read by Dr. Spencer.

Dr. James F. Mitchell participated in a four-day meeting held at Johns Hopkins Hospital in Baltimore, February 6–9, to commemorate the work of Dr. William Stewart Halsted, who was the first Professor of Surgery at Johns Hopkins Medical School and Chief of Surgery at the Hospital. The meeting was sponsored by the Society of Clinical Surgery, of which Dr. Mitchell is a member, the Society of University Surgeons, and the Halsted Club. Dr. Mitchell was associated with Dr. Halsted at Johns Hopkins for ten years and presented a paper at the meeting entitled, "Memories of Dr. Halsted, 1893-1903."

Drs. Samuel M. Dodek and Joseph M. Friedman presented a scientific exhibit on "The Use of Curare in Obstetrics" at the Fifth American Congress on Obstetrics and Gynecology in Cincinnati, March 31 to April 4. This exhibit was based partly on the preliminary report on the same subject by Drs. Dodek, Friedman, Howard Katzman and Sollie Katzman, which appeared in the November 1949 issue of the MEDICAL ANNALS.

Dr. J. Dewitt Fox, Editor of *Life and Health*, and Dr. D. G. Miller, Jr., of Morgantown, Ky., received the first year's M & R Awards, March 25, at the Scientific Assembly of the American Academy of General Practice in Atlantic City. The awards were $1,000 each for contributions published in GP during 1951. The two scientific articles which were selected for the 1951 awards were "ACTH and Cortisone—Miracle Therapy or Medical Tool?" by Dr. Fox (GP, February 1951) and "Bites and Stings" by Dr. Miller (July 1951 issue).

M & R Laboratories is the donor of these awards, which are to be presented annually by AAGP to the two Academy members who contribute the most significant articles for publication in GP.

The Smith-Reed-Russell Society, honor society of George Washington University School of Medicine, inducted three new members into its fellowship on March 19. They were **Dr. John M. Evans,** Assistant Professor of Clinical Medicine; **Dr. Joseph M. LoPresti,** Assistant Professor of Pediatrics; **and Dr. Paul K. Smith,** Professor of Pharmacology, all staff members of the University.

Dr. Nathan A. Womack, Professor of Surgery at the University of North Carolina, gave an inspiring address.

Dr. Hugh H. Hussey, Editor of GP, was the banquet speaker at the Third Annual Frank Hilton McLeod Memorial Scientific Assembly, March 20, in Florence, S.C. The staff of the McLeod Infirmary presents this clinic of scientific discussion annually in memory of the founder of the institution. The banquet was held at the Florence Country Club;

Dr. Julian P. Price, Editor of the *Journal of the South Carolina Medical Association*, presided at the dinner meeting. Dr. Hussey spoke on "Medical Reading and Medical Writing."

Dr. J. Ross Veal, President of the Federation of Citizens' Associations, presided at the Federation's 42nd birthday party, March 22. The anniversary dinner was held at the Mayflower Hotel and was attended by more than 600 persons. Most of those present represented the Federation's 65 member bodies in the District of Columbia, which include the District Medical Society. Senator John J. Sparkman of Alabama was the principal speaker.

Dr. Thomas Parran, Dean of the Graduate School of Public Health of the University of Pittsburgh, was one of 22 alumni of Georgetown University who were honored for outstanding achievement at a dinner at the Mayflower Hotel, April 26. For many years Dr. Parran was Surgeon General of the U. S. Public Health Service. He is an Honorary member of the District Medical Society.

Dr. Garnet W. Ault, Professor of Proctology, Georgetown University School of Medicine, was visiting faculty member for the continuation course in proctology which was held April 14–19 at the Center for Continuation Study of the University of Minnesota. Dr. O. H. Wangensteen, Chairman of the Department of Surgery, and Dr. Walter A. Fansler, Director of the Division of Proctology, directed the course.

Dr. Wallace M. Yater presented a paper entitled, "Recent Advances in Diagnosis," at the 4th Annual Scientific Assembly of the American Academy of General Practice in Atlantic City on March 26. He also acted as moderator for a panel discussion on the subject, "Progress in Medicine—Information Please."

Dr. Robert P. Odenwald, Medical Director of the Child Center and Professor of Psychiatry, Catholic University, **and Dr. Dorothy Donley-Dowd,** Washington psychiatrist, were among those who received special recognition for their work in family life and child psychiatry at the 20th Annual National Catholic Family Life Conference in Columbus, Ohio, March 24–26. Dr. Odenwald addressed the assembly, estimated at more than 2,000 physicians, teachers and clergymen, on "Present Day Errors in Child Training."

Rear Admiral Lamont Pugh, Surgeon General of the Navy, was invited to address the 25th Annual Spring Congress in Ophthalmology, Otolaryngology, and Allied Specialties, April 9, at the Gill Memorial Eye, Ear and Throat Hospital in Roanoke, Virginia.

CALENDAR OF SPEAKERS

The following members of the Medical Society of the District of Columbia have addressed lay groups during the past several weeks. The Society maintains a Speakers Bureau, sponsored by the Committee on Public Relations, through which requests for speakers for lay groups can be filled.

Date	*Speaker*	*Subject or Title*	*Organization*
March 19	Dr. Walter Freeman	Surgery in Mental Cases	Lions Club
March 25	Dr. Gordon W. Daisley, Jr.	Child Care	Southwest Nursery Parent-Teachers Association
April 7	Dr. Ralph G. Beachley	What the State of Virginia Does for the Crippled Child	Women's Auxiliary to Anderson Orthopedic Hospital
April 20	Dr. Robert P. Odenwald	Evaluation of the Various Schools of Psychoanalysis	National Catholic Social Workers Association
April 23	Dr. Dorothy Donley-Dowd	Psychopathology of Cerebral Palsy	D. C. Society for Crippled Children
May 14	Dr. William F. O'Donnell	Pediatric Aspects of Cerebral Palsy	D. C. Society for Crippled Children

He spoke on "The Relationship of Navy Medicine to Ophthalmology and Otolaryngology."

The following day Admiral Pugh addressed the Roanoke Chapter of the University of Virginia Alumni Association.

Dr. Harold Jeghers, Professor of Medicine, Georgetown University School of Medicine, lectured at Marquette University School of Medicine in Milwaukee, Wisconsin, March 31, on the subject, "Carcinoma of the Stomach." On April 1 he was in Chicago and gave a talk on the same subject at the School of Medicine of the University of Illinois.

Dr. Samuel Benjamin enrolled for a postgraduate course on "Clinical Medicine from the Hematological Viewpoint" at Ohio State University, Columbus, in March. The course was sponsored by the American College of Physicians.

Dr. William J. Tobin was reappointed Chairman of the Medical Advisory Committee of the **D. C. Chapter of the National Foundation for Infantile Paralysis, Inc.** Dr. Tobin is Associate Professor of Orthopedic Surgery at Georgetown University School of Medicine. **Dr. Edgar P. Copeland,** Chief of Staff of Children's Hospital, was reappointed Chairman of the Nominating Committee.

Theodore Wiprud, Secretary of the District Medical Society, was guest instructor for the Seminar on Medical and Public Health Economics for senior medical students at Howard University School of Medicine, April 1 and 8. He addressed a class of 72 members on "The Business Aspects of Medical Practice."

Dr. Daniel L. Seckinger, Director of Public Health for the District of Columbia, was the guest speaker at the meeting, March 27, of the Medico-Chirurgical Society held at the Kappa Fraternity House. "Changing Concepts in Public Health and Medical Care Services" was the topic he discussed.

Dr. Thomas M. Peery, Professor of Pathology, George Washington University School of Medicine, spoke at the 49th Annual Meeting of the American Association of Pathologists and Bacteriologists at the Hotel New Yorker in New York City, April 10. The subject of Dr. Peery's address was, "Does Brucellosis Cause Calcific Aortic Stenosis? I. The Pathologic Evidence."

Dr. Irving B. Brick, Assistant Professor of Medicine, Georgetown University School of Medicine, participated, by special invitation, in an all-day symposium, March 27, on various aspects of viral hepatitis at the Armed Forces Institute of Pathology. The meeting was held under the auspices of the Liver Biopsy Registry at the Institute, and clinicians and pathologists interested in liver disease were invited to attend.

Dr. Theodore C. Keller, an Associate member of the District Medical Society, is living in Miami, Florida, and has affiliated with the Dade County Medical Society. His address is 2295 S.W. 16th Court.

Dr. Leonard B. Rose is on the staff of the Veterans Administration Hospital in Albany, New York, and has been appointed Instructor in Medicine at the Albany Medical College.

CORRESPONDENCE

Editor's note: The following communication was received from one of the firms dealing in medical diathermy equipment. The writer asked that his name be not used and his wish was respected in view of the reliability of the firm he represents.

Washington, D.C., April 14, 1952

To the Editor:

I feel that certain clarification is necessary to the article which appeared in the Medical Annals of March 1952 concerning F.C.C. Approval for Medical Diathermy Equipment.

Although the factual statements set forth are correct, the optimistic tenor of the article concerning the possibility of modifying old equipment to conform to the new rules seems hardly warranted.

While it is true that the Commission's regulations concerning approved equipment calls only for certain engineering standards, and that any machine that meets those standards will be approved or certified by the Commission, it is equally true that converting an old machine to meet those new requirements is difficult from an economic standpoint. It has never been done to date.

Frequently doctors have been approached by radio engineers with the suggestion that they can convert the old units, but after thorough study of both the units and regulations they have given it up as hopeless. There is no doubt that physicians would save tremendous amounts of money if these conversions were feasible and it has consequently been studied from every aspect ever since the new regulations were announced. It should be emphasized that, to our knowledge, not a single successful conversion has been accomplished.

Physicians should also be warned that in at least two instances they have been victimized by groups who either mistakenly or with deliberate intent have offered to convert doctor's equipment at low prices.

A group in California offered to sell doctors a device to plug in the present machines that would make it immediately conform to the new regulations and to put it on frequency and to suppress harmonics. Such a device is electronically impossible. From an engineering standpoint it is impossible to suppress harmonics or to accurately channelize frequency by anything other than a complete rebuilding of the entire chassis, with an entirely new circuit, new shielding and probably new cabinet.

A group of "engineers" in Philadelphia recently offered to make any old diathermy meet the new regulations at a flat fee of about a hundred dollars. They were not able to convert a single diathermy. The F.C.C. testing laboratories at Laurel have never certified a converted non-frequency controlled machine.

The *Archives of Physical Medicine,* in the March 1952 issue, carried an article entitled "Diathermy Rules and the Physician" written by Dr. Hall of the Electronic Division of Bureau of Standards. Among other things he said:

"The physician may perhaps be justified in thinking that his machine can be rebuilt without too great expense in order to comply to the new requirements. This would not be economically feasible unless a large number of machines were involved. It is unlikely that the individual physician would save much money by such an arrangement, even if it should be possible. . . .

"From the foregoing discussion it is apparent that the most economical procedure for the physician using diathermy equipment is to obtain apparatus which has been given type approval by the Federal Communications Commission."

The writer would like to suggest that if any physician is approached by anyone offering to convert his machine at any price to conform to new regulations, that the engineer first be asked to produce one machine that he has satisfactorily converted and that has been certified by the Federal Communications Commission.

BOOK REVIEWS

Physical Medicine and Rehabilitation for the Clinician. Edited by Frank H. Krusen, M.D., Professor of Physical Medicine, Mayo Foundation, and Head of the Section on Physical Medicine and Rehabilitation, Mayo Clinic, Rochester, Minnesota, with articles by twenty-four contributors. Price, $6.50. Pp. 371, with 96 figures and 13 tables. Philadelphia: Saunders, 1951.

This book, which is made up of a series of lectures prepared for the American College of Physicians, is designed primarily to acquaint the average clinician with all the phases of a rapidly developing new special branch of medicine—physical medicine and rehabilitation. The chapters have been prepared by members of the staff of the Mayo Clinic, and, in several instances, by other leading specialists in physical medicine and rehabilitation in various parts of the United States. The discussions of the latest developments in physical medicine and rehabilitation will be of particular benefit to the specialist in this field, the physiatrist. Medical students, physical therapists, and occupational therapists will find much value in this book.

The contents of this book fall logically into four major sections. The first section deals with therapeutic applications of physical agents and procedures. In this section appears an important chapter on prescription writing in physical medicine which should be extremely useful to every clinician. In addition there are chapters dealing with heat, massage, exercise, training in posture, procedures for rest and relaxation, occupational therapy, and ultraviolet radiation. Finally, there is included in this section experimental studies concerning new physical agents, microwaves, and ultrasonic energy.

The second section covers diagnostic applications of physical agents and procedures. Included here are chapters on electrodiagnosis, on testing procedures in the evaluation of pain and in neurologic diagnosis, and on measurements of temperatures in the study of circulation.

The third section presents the clinical aspects of the field and is composed of discussions by outstanding authorities from various medical centers. Here are covered the organization and management of physical medicine and rehabilitation in a general hospital, and treatment and rehabilitation of hemiplegia, painful feet, poliomyelitis, tuberculosis and other pathologic lesions of the chest, cerebral palsy, paraplegia, arthritis, frostbite and various other conditions.

The fourth and final section contains chapters on the fundamentals of anatomy, therapeutic exercise and physiology, and the physiologic effects of rest and immobilization. This chapter is of especial value to the clinician who desires a brief refresher course in functional anatomy and physiology in order to use physical medicine and rehabilitation procedures intelligently in h's practice.

This is an authoritative collection of information which will provide, for the first time, an up-to-date source of reference and knowledge in this fastest growing of the new specialties, physical medicine and rehabilitation. Although in this volume there are still a few gaps in the total of information in this field, it serves nevertheless as the most complete and scientifically dependable body of knowledge for the average clinician that has been compiled to date. It will undoubtedly prove a most welcome addition to the field of physical medicine and rehabilitation.

JOSEPHINE J. BUCHANAN, M.D.

Psychosomatic Gynecology: Including Problems of Obstetrical Care. WILLIAM S. KROGER, M.D., Assistant Clinical Professor of Obstetrics and Gynecology, Chicago Medical School; Attending Obstetrician and Gynecologist, Edgewater Hospital, Chicago, AND S. CHARLES FREED, M.D., Adjunct in Medicine, Mount Zion Hospital, San Francisco, California. Price, $8.00. Pp. 503. Philadelphia: Saunders, 1951.

The book is an account of the personal experiences of the authors with a fairly large group of obstetric and gynecologic patients who were treated primarily by psychosomatic technics. The book contains an extensive review of the current literature on that subject. Included also is a chapter written by Grantly Dick Read on the psychosomatic aspects of "natural childbirth."

The book is interesting to read from the standpoint of the obstetrician and gynecologist. As the authors are not psychiatrists there may be val'd criticism of some of the statements from a strictly psychiatric point of view.

Because so much of the material presented is of a controversial nature it is difficult to give a completely unbiased report of the text. As a reference book it should be included in any medical library. It should be of more than passing interest to the specialist in obstetrics and gynecology.

ROBERT H. BARTER, M.D.

The Problem Drinker. JOSEPH HIRSH. Price, $3.00. Pp. 211. New York: Duell, Sloan & Pearce, Inc., 1949.

If this book is read and digested by enough of the right people, then it may well be said that Mr. Hirsh has made an outstanding contribution to the Nation's progress in the more humane, sensible and economical treatment of the problem of alcoholism, in which, in the author's words, America heads the list.

Soberly, carefully, Mr. Hirsh has outlined the history of alcoholism, its facts and its fables, its physiologic symptoms and effects, its social and economic ramifications, to develop the idea that:

"Alcoholics are sick people; not merely in their uncontrolled craving for, their utter dependence upon and their inability to break with alcohol, but in the physical and mental damage they suffer." It is on these grounds, he says: "Alcoholism becomes a medical problem and a medical responsibility—they constitute what this book means by problem drinking."

Mr. Hirsh very appropriately emphasizes "that descriptions and labels of the various types of problem drinkers do little to explain why they drink excessively." He clearly points out that the theories and speculations concerning the causes of problem drinking leave much unclarified. That alcoholism is itself inheritable and can be passed on to the children from parents has been invalidated by scientific studies. The existence and discovery of a pathophysiologic mechanism to explain the etiology of alcoholism continues to be a matter of research. Even the theories of psychiatrists and psychoanalysts have no appreciable consensus. Whatever the exact mechanisms, whatever the unknown causes, physical and mental, problem drinkers are sick people.

Pointing out the fact, long known to members of Alcoholics Anonymous (who also are cited for their continuing work in helping chronic drinkers to rehabilitate themselves) that the compulsive drinker can never be CURED, in the sense that he or she may ever again become a social drinker, the author practically demands that society in general and legislators, doctors and hospitals in particular cease moralizing about problem drinkers and begin to consider them as patients, just as victims of VD and tuberculosis, once social outcasts, are being treated today.

His presentation of facts and statistics, to which the author adheres closely, is anything but dry and will admirably serve to bring home to the thoughtful reader the idea that NOW is the time to consider problem drinking as a medical, social and economic issue and not merely a political football. This issue, says Mr. Hirsh, is costing this Nation over one billion dollars annually in wage losses, decreased productivity, and inefficiency because our handling of the problem today is "rooted in ignorance, bitterness and in prejudice."

Talk of the elimination of problem drinking as a medical and social enigma through legislative prohibition, says the author, is unscientific and unrealistic.

The prospects for a more intelligent consideration of this "national heartache" are, the author feels, more hopeful, since many states and communities, under the capable leadership of the Research Council on Problems of Alcohol, of which Mr. Hirsh is Executive Director, and the Yale plan of Alcohol Studies, are enacting legislation and effecting sensible rehabilitation programs which will halt the pitiful, aimless shunting of alcoholics through the courts and jails and send them to the hospitals and clinics where they rightfully belong.

This comprehensive and excellent little volume should be MUST reading for all members of the medical profession and social workers who, day after day, are faced with The Problem Drinker.

H. FOSTER HUNTER
A. ZAPPALA, M.D.

WILLIAM HARRISON NORTON, Phar. D., M.D.

(1888–1952)

Dr. William H. Norton, an Associate member of the District Medical Society, died February 28, 1952, at Sibley Memorial Hospital following an illness of more than six months. He had been a practicing physician in Mount Rainier, Maryland, for the past 34 years, where he maintained offices next to his home at 3829-34th Street.

Dr. Norton was born in Florence, Washington, March 30, 1888, but had lived in the District of Columbia and vicinity since 1908. He graduated from the School of Pharmacy of George Washington University in 1912 and from the School of Medicine four years later, 1916. He was intern and resident physician at Sibley Hospital from 1916 to 1918 and then served for a year with the U. S. Medical Reserve Corps in World War I, with the commission of First Lieutenant.

Following his Army service Dr. Norton began his general practice in Mount Rainier, which he continued until his last illness. For several years he was physician to the National Training School for Boys.

Dr. Norton was an Associate member of the Medical Society of the District of Columbia from 1932 until his death. He was a member of the Prince Georges County Medical Society, the Medical and Chirurgical Faculty of the State of Maryland, and the American Medical Association. He belonged to the Mount Herman Masonic Lodge in Hyattsville and to the Huntemann-Huff Post 110 of the American Legion. He was a member of the Temple Baptist Church.

Surviving are two sisters, Miss Florence E. Norton, who lived with her brother in Mount Rainier, and Mrs. Myrtle A. Nivison, of Webster, New York.

Rehabilitation Program for Tuberculous—Leibovici

(*Continued from page 240*)

of the patient from the milieu of the sanatorium to the milieu of the home, with its demands, both emotional and physical. When we succeed in "controlling" a patient's disease we must understand that this is occurring in a "controlled" environment. After the patient leaves the hospital, there appear economic and social factors which were not so evident or pressing during his period of treatment. The patient needs assistance in readapting himself to the outside environment. The transition should be gradual and should be made under medical supervision. His functional disability should be evaluated, his work capacity increased gradually, and discharge considered only when he has demonstrated a work capacity adequate for his future plans, or when his future plans have been adjusted to a limited capacity. In the present study it was found that patients who accepted and completed rehabilitation, and who were discharged when judged ready for return to whatever activity awaited them, did much better than the patients who did not complete their rehabilitation. Thus, rehabilitation is a definite part of the treatment of tuberculosis. It is beneficial to the patient in greatly increasing the probability of his remaining well, and it is of benefit to the community by reducing costly readmissions to the hospital, loss of productivity and earning power, and expenditure of public funds.

Recent Advances in Diagnosis—Yater

(*Continued from page 268*)

poses. If the normal eosinopenia does not occur the hormone should not be employed. The test is not significant if there is a severe eosinophilia, nor is it valid in patients already under stress.

I cannot begin to discuss diagnostic methods in the great field of infectious diseases. One hears much of cancer tests, yet there are none of real value to date.

If my disjointed remarks have been dogmatic, it is partly because of lack of time. Also, I am not an authority on any of the subjects discussed. I am struggling along trying to take care of my patients and at the same time keep abreast of medical progress. It is a "tough job."

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THE TREATMENT OF CANCER*

CALVIN T. KLOPP, M.D.

Director, George Washington University Cancer Clinic, Washington

COMPLETE destruction or removal of each cancer cell is the aim of cancer treatment. Today this can still be accomplished only if all cancer cells are contained within a limited region or regions of the body. Then surgical excision or selective destruction by irradiation will control the cancer provided it is not of multicentric origin or produced by an etiologic agent which is still acting. In the latter instances, presently available treatment is only palliative. Only potentially curative treatment will be considered in this presentation.

The most difficult decisions in cancer therapy today involve the measurable extremes of the disease, that is, the tiniest and the largest of the cancers. When is attention to minute lesions meddlesome? When can minute lesions be treated by lesser procedures? When are massive operations too destructive? These are the problems which will be considered.

Each cancer begins as a microscopic lesion. Some, like carcinoma of the uterine cervix, can be detected by tests before the lesion becomes visible to the eye even when magnification is used.[1] As each such cancer grows, it eventually produces sufficient local change that its presence can be noted by examination of the patient. These early minute changes appear innocuous and have no resemblance to the cancer described in textbooks of pathology, medicine or surgery. These early minute cancers look just like many tiny benign lesions; the latter greatly outnumber the former. Thus, the first problem is created: When must a minute, small lesion be regarded as sufficiently serious to warrant investigation, investigation invariably meaning surgical excision with microscopic examination of the excised specimen.

Two examples illustrate the problem. A 29-year-old girl had noted a swelling overlying the right zygoma anterior to the ear. Six months prior to examination, while looking in the mirror, she had noted the asymmetry of her face. For about 3 months she had episodes of local discomfort. Numerous physicians whom she consulted felt that this was of no consequence. All studies and X-ray examinations were normal. One could make out the prominence which she had noted, but no mass could be felt. Surgical exploration of the area was the only procedure which might yield further information. This was suggested with some reticence, because adequate exploration involved exposure of the facial nerve. The patient was insistent that surgery be done. At operation the nerve was exposed and all structures in the area of the prominence dissected out, even to the extent of drilling a hole into the zygomatic arch. It almost appeared that the operation had been unnecessary when a flattened nodule less than 1 cm. in diameter was uncovered and, on frozen section, found to be a sarcoma of nerve sheath origin. Adequate excision was then done and the patient has done well to date.

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* Delivered at the Midwinter Seminar of the Medical Society of the District of Columbia, February 20, 1952.

The second example is a 63-year-old man, whose brother, 3 weeks previously, had had a total laryngectomy for carcinoma of the larynx. Having had slight hoarseness for 5 months, and having visited his brother in the hospital, he requested examination. On mirror examination of the larynx no definite lesion could be seen. Direct laryngoscopy also did not reveal a lesion. Observation was continued for 3 months, when direct laryngoscopy was repeated. He developed stridor, and a tracheostomy was required. At this time the under surface of the vocal cords was viewed and a suggestive minute area excised for study. This showed leukoplakia with changes suggesting that the specimen had been taken from the edge of a cancer. At this stage he consented to surgical exploration of his larynx by laryngotomy. With the mucous membrane of the larynx thus exposed, a tiny ulceration (2 mm. in diameter) was noted and excised. It was thought that the operation had perhaps been unnecessary until examination of the sections disclosed an epidermoid carcinoma, grade II, completely excised.

The problem of the potential seriousness of minute lesions can be solved only by aggressive treatment. More attention must be paid to seemingly insignificant "pimples and bumps." The difficulties encountered produce some justifiable indecision. The problem is similar to that faced by Pavlov's dogs which were fed when a given musical note was sounded (i.e., middle C) and were painfully stimulated when a second note was sounded (i.e., middle B). Gradually, the frequencies of the signals for food and pain were changed, bringing them closer together. When the signals were so near identical that the dogs were unable to determine if they were to be fed or painfully stimulated, they became nervous, irritable and "psychotic." At present, when the physician deals with small lesions, he is often unable, by gross examination, to separate the cancer from the bump and can only overcome his indecision and assure his patient authoritatively by resorting to a special test, that is, excision and microscopic examination. Submission of these minute lesions is now beginning to worry the pathologist, who must now make a decision on very few cells. This aspect will not be considered except to note that the pathologist will probably soon need help from the biochemist or immunologist.

The choice of curative treatment for each specific cancer lies between surgery and irradiation therapy. Usually, only one is indicated; almost never is one just as good as the other. In order to decide which is preferable, it is necessary to know (1) what the end-results of treatment of similar cases are, and (2) what quality of the treatment is available.

Nothing can do greater harm than to act on a decision based on a case which has neither been followed for many years after treatment nor been compared with similar cases treated by other methods. Nothing can be less true than to assume that all surgery or all radiation therapy is well executed, adequate, and excellent. Although adequate surgery or irradiation therapy can control cancer, no facts support a concept that less than that amount of either form of treatment ever cures a cancer. Fortunately, cancer treatment, as carried out by most members of the medical profession, is good treatment.

Therapy is determined by a knowledge of the biologic behavior of each cancer and of the results which have already been obtained by therapy. When treatment for a specific type of cancer has been standardized, and the standard treatment is used by surgeons and radiologists with minimal individual modification, results are best.

For example, cancer of the female breast is treated by radical mastectomy unless very clearly defined contraindications are present. These contraindications are based on the excellent work of Haagensen and Stout,[2] who determined the end-result of treatment of each case of breast cancer seen in their clinic. Surgery was found to be of benefit in all cases unless the following conditions were present:

1. Extensive edema of the skin over the breast
2. Satellite nodules in the skin over the breast
3. Intercostal or parasternal tumor nodules
4. Edema of the arm
5. Proved supraclavicular metastases
6. Carcinoma is the inflammatory type
7. Distant metastases are demonstrated
8. Any 2, or more, of the following signs of locally advanced carcinoma:
    a. Ulceration of the skin
    b. Edema of the skin of limited extent (less than one third of the skin over the breast involved)
    c. Fixation of the tumor to the chest wall
    d. Axillary lymph nodes measuring 2.5 cm. or more in transverse diameter, and proved to contain metastases by biopsy
    e. Fixation of axillary lymph nodes to the skin of the deep structures of the axilla, and proved to contain metastases by biopsy.

When these were present, surgery was never curative.

Irradiation therapy alone is no cure for breast cancer. Although this should halt controversy as to curative therapy, such still occurs. Often, if a patient is too old (an age which is never defined), irradiation therapy is suggested rather than surgery, even though the cancer is operable according to the criteria previously presented. This advice is given, although there is no evidence to support the concept that a healthy old person tolerates surgery less well than a healthy young person. Again, irradiation rather than surgery is advised, because it is believed that the patient will not live sufficiently long to have obtained benefit from the operation, although there is no evidence to support the concept that any physician can, if he dared to presume to do so, predict how much longer any single patient will live. Or, irradiation rather than surgery may be advised because it is thought better that the patient die of cancer than suffer the trials of operation. The life history of untreated cancer indicates that this rarely is a wise course.

Even when treatment is well standardized, the attitude of the physician or surgeon, or both, may determine the cancer cure rate of a given institution or region. A difference of philosophy between physicians can be justified, but opposing views should be presented to most patients who may wish to help make their own decisions. A surgeon or surgical service which turns down many potentially curable cancer patients as being in too poor general condition for surgery may be shirking responsibility in order to secure an operative mortality rate which is more favorable than that of others. An internist or medical service which finds many potentially curable cancer patients unfit for surgery may be avoiding the responsibility which comes with bringing each such patient into the best possible physiologic state and then trying to carry a majority through surgery and convalescence. Inadequately treated cancer is a fatal disease. Here lies the challenge: to guide as many of these victims as possible through a course of adequate therapy rather than to limit benefits to a very few. The cancer patient will often prefer a chance at permanent cure to a more certain guarantee of a few months of life.

The philosophy of the surgeon also influences the determination of operability of the local cancer. Because of development of better technics of anesthesia, more careful attention to replacement of blood, and better maintenance of fluid and nutritional balance, extensive operations can be performed with relative safety. The well trained surgeon must now decide how extensive and/or multilating an operation he will perform rather than whether he can or cannot remove the cancer. His philosophy will determine his decision and the advice which he will give his patient. The course decided upon may determine whether or not the patient will die of his cancer. Therefore, it is not unreasonable that the patient himself should be told the facts so that he may help to arrive at a decision. To state these facts accurately, the advising physician must have firsthand knowledge of the degree of any disability and/or deformity which may be produced. A physician who has never cared for a patient whose larynx or tongue has been removed may be unaware of the happy, useful life such patients may lead. On the other hand, a patient with cancer of the larynx who has been fully informed as to the post-laryngectomy state and who has seen and talked with laryngectomized individuals will rarely refuse laryngectomy. If he does elect not to accept surgery, he will have fewer regrets and no bitter feeling toward his physicians when the cancer has progressed and is producing distressing symptoms. A patient with cancer of the larynx who has not been adequately informed is often severely critical of his advising physician when the distressing terminal symptoms are present and little further medical aid is available; this is especially true if he discovers that the treatment which could have been carried out would not have been inconsistent with a tolerably happy existence.

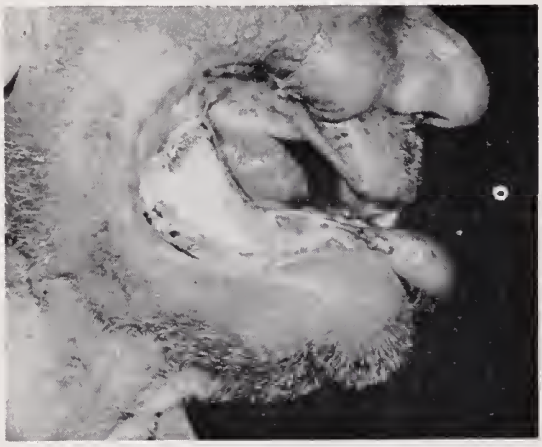

FIG. 1. Defect produced by extensive surgical removal of carcinoma of buccal mucosa originally considered incurable. Note exposed mandible which was later excised.

These decisions are difficult and cannot be made purely by logic; personal feelings will also contribute. Accurate individual prognosis is impossible. There is a science of statistics which prognosticates the fate of a group of patients accurately; this tells nothing as to the fate of any single patient. When should treatment not be given?

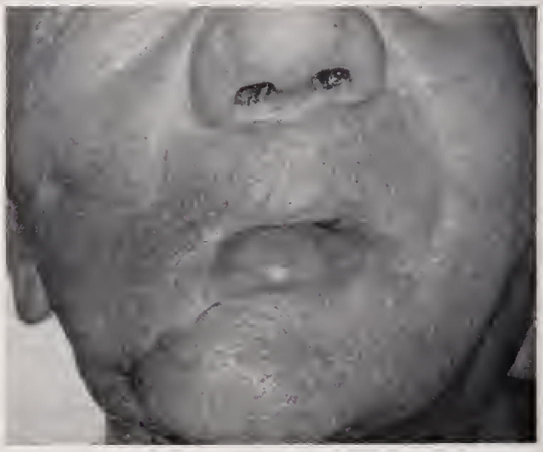

FIG. 2. Same patient as in figure 1, shown 3½ years later, now free of any evidence of cancer and satisfactorily rehabilitated.

For example, a 69-year-old man had an ulceration of the right buccal mucosa of 2 months' duration. The entire right buccal mucosa was replaced by squamous cancer which extended onto the adjoining mandible and maxilla. He appeared incurable unless a very extensive and destructive operation was performed. Having been informed of the disability which would be produced, the patient refused surgery and elected to be treated by means of X-rays. After a cancerocidal dose of X-rays had been delivered to the area, extremely painful necrosis developed. He then consented to wide surgical excision which produced a large defect; the entire right mandible was exposed (figure 1). He drooled saliva and required tube feedings. The pain was still severe. Then the mandible became fractured and was excised. Eight months had now elapsed since the beginning of therapy and he had no evidence of residual cancer. Reconstruction was begun and completed in the following 12 months. Now, $3\frac{1}{2}$ years after he had been declared incurable (figure 2), he is free of disease and able to return to his previous occupation. It would have been so easy, having become discouraged at some point, to discontinue treatment, especially when it became destructive. Such an example clearly demonstrates that any decision that a given case is incurable while still operable should be made only after long and serious thought. With few exceptions, the patient should participate in the decision.

A second example is that of a 78-year-old woman who had had a basal cell carcinoma of the left side of the face for 30 years. At the time of examination an ulcerated cancer was present extending from the lateral wall of the left orbit to the bridge of the nose and from the roof of the orbit to just above the hard palate. X-ray examination revealed destruction of the upper left malar bone and inferior margin of the orbit. This extensive lesion was considered by the radiologist to be incurable. It was considered potentially curable by the surgeon provided that an extensive removal was done, a mutilating operation. On July 16, 1947 the lesion was removed, together with the left orbital contents and a large segment of maxilla (figure 3). Her course was uneventful. She has remained free of further cancer to date. Not too many years ago curative treatment would not have been suggested; opiates, a little X-ray therapy, and nursing care would have been offered. Advanced cancer in the maxilla and in other areas can now be controlled occasionally by an extensive operation, if the surgeon believes such is indicated and the patient will accept the mutilation and/or risk.

Similar problems are faced by the patient who cannot be cured by present treatment methods. He is like a soldier whose outfit faces certain defeat. He may surrender without a struggle, considering himself expendable and further effort futile. Under these circumstances his morale will be low. Or, he may choose to fight a fierce rear-guard action, believing that his actions, although of little importance in themsleves, will be a small but definite contribution toward a later victory. Under these circumstances his morale will be high. The terminal cancer patient who elects to be treated by experimental therapy or participates in a program of clinical investigation fights such a fierce rear-guard action. His morale is better since not only does he nurture to the end the chance of receiving benefit, but also feels that by his efforts he is helping others who will later face this same problem.

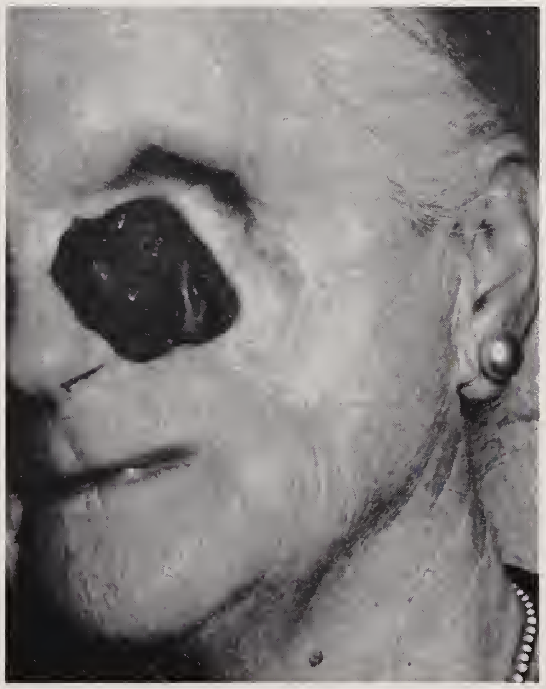

FIG. 3. Extensive defect produced by surgical removal of neglected basal cell skin cancer. The patient, originally considered incurable, has no residual cancer and is satisfactorily rehabilitated.

Knowing that surgery and irradiation therapy can cure no more than 50 per cent of cancer patients, cancer therapists must undertake the responsibility for planning and evaluating new methods of treatment. Cancer clinics are admirably suited to be the nucleus for these programs. The development and execution of a program of clinical investigation is the best justification for support of these clinics.

Some of these research programs concern chemotherapy: an attempt to find a drug which, when administered to a cancer patient, will (1) destroy the cancer cells without being harmful to normal cells, (2) will render cancer cells more sensitive to irradiation therapy and/or normal cells more resistant, or (3) will partially destroy the cancer, transferring an inoperable into an operable lesion. Several programs exist, such as the study of folic acid antagonists at Children's Hospital in Boston[3]; the study of the nitrogen mustards and triethylene melamine at Memorial Hospital in New York City[4]; the study of hormone therapy at the Massachusetts General Hospital[5] and the University of Chicago[6]; as well as others.

At the George Washington University Cancer Clinic studies in cancer chemotherapy have been directed toward attempts to increase the effectiveness of certain drugs by varying the route of administration and/or the dosage schedule.[7, 8, 9] For these studies we accept only patients who cannot be helped or refuse to be helped by surgery or irradiation. The methods used have been previously tested on animals. Of the present studies, the most intriguing concerns the effects of the concurrent intra-arterial administration of nitrogen mustard (methyl-bis[B-chloroethyl]amine hydrochloride) and large doses of aureomycin hydrochloride buffered with sodium glycinate or leucine. Both drugs are administered until toxic symptoms are produced in normal organs; a depression of bone marrow activity is produced by the nitrogen mustard[10] and a depression of bilirubin secretion by the aureomycin.[11] Some degree of local regression has been reproduced by this method in almost all treated cancer patients. This effect is not considered to be an antiviral action but a direct effect of both nitrogen mustard and aureomycin on intracellular metabolism.

For example, an osteogenic sarcoma of the pelvis the size of an 8 months' pregnant uterus was treated by the intra-aortic administration of nitrogen mustard and buffered aureomycin hydrochloride. It decreased in size to that of a 4-months' pregnant uterus. The residual tumor was successfully removed; the tumor had unquestionably not been resectable prior to treatment. Histologic examination of the excised tumor demonstrated changes consistent with regression.

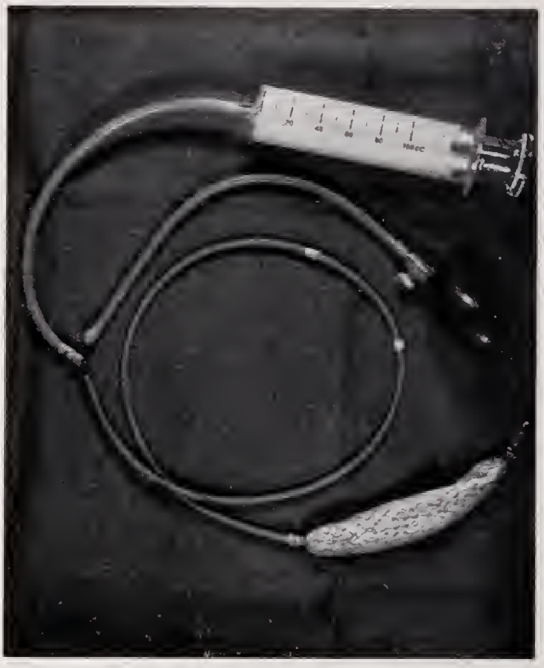

FIG. 4. Equipment for obtaining cells exfoliated from gastric mucosa. A veil-covered balloon is attached to distal end of a double lumen tube with a Rehfuss tip.

At George Washington University Cancer Clinic, under the direction of Dr. Lois Platt, another type of clinical investigation is directed at development and evaluation of methods which will detect cancer at an earlier stage. Among the most promising is the study of the "balloon" technic which was originally developed under Papanicolaou's direction[12] at Cornell Medical School. This is a method for detecting early gastric cancer. A large balloon, covered with a modified veil, is attached to the distal end of a double lumen tube with a Rehfuss tip (figure 4).

(Continued on page 353)

THE SIGNIFICANCE OF LOW PROTHROMBIN CONCENTRATION PRIOR TO DICUMAROL THERAPY IN MYOCARDIAL INFARCTION

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IN PATIENTS with myocardial infarction several observers have noted abnormal prothrombin activity before dicumarol therapy. In most instances a prolongation of the prothrombin time of undiluted plasma has been reported,[1–4] while a shortening of the prothrombin time with diluted (12.5 per cent) plasma has been observed.[5, 6]

This apparent contradiction can be resolved only by assuming that the test on whole plasma measures a different substance or group of substances than that measured in dilute plasma. For a consideration of these differences the reader is referred to the article by Brambel[7] and the discussion following.

In our laboratory, prothrombin determinations are performed on whole plasma according to the original 1-stage method of Quick,[8] except that Bacto-thromboplastin (Difco) is used as the source of thromboplastin. With this source of thromboplastin, normal undiluted plasmas give a result of 13 to 15 seconds. A curve is plotted each day giving the clotting time, in seconds, of various dilutions of the control plasma. The clotting times of the undiluted test plasmas are plotted on this curve to obtain the "prothombin concentration," although we realize that more than one factor may be reflected in the test results. The terms "prothrombin concentration," "prothrombin level," and "prothrombin value" as used in this report indicate the dilution of the control plasma giving a prothrombin time equal to that of the undiluted test plasma.

This study was undertaken to learn the frequency and significance of the initial low prothrombin concentration in certain cases of myocardial infarction.

NATURE OF STUDY

Between August 1, 1949 and October 31, 1950 there were 136 cases indexed as myocardial infarction in the George Washington University Hospital. Of this group, 12 patients (9 per cent) showed an initial prothrombin concentration of less than 30 per cent, and 49 (36 per cent) showed an initial value of 30 to 49 per cent. These 61 patients comprise the study group. A control group of 43 patients was selected from the remainder. These were chosen at random except that the ratio between those admitted in 1949 and those admitted in 1950 was the same as in the study group. In the control group the initial prothrombin concentration was 50 to 74 per cent in 27 cases and 75 to 100 per cent in 16 cases.

The hospital records of all cases in the study and control groups were reviewed carefully, and certain data were recorded from each. In addition, a chart was prepared on each case showing the daily dosage (if any) of dicumarol and heparin, and all determinations of the prothrombin concentration. Finally, during the last week of August, 1951 a follow-up inquiry was sent to all physicians who had attended surviving patients in both groups.

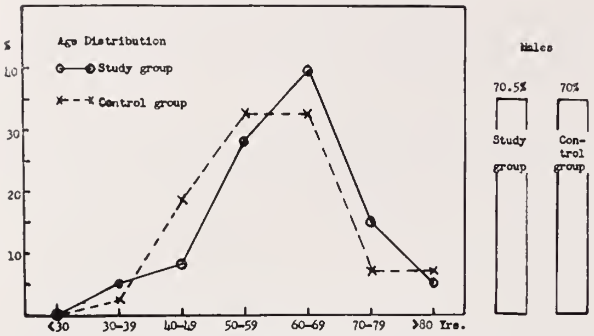

FIG. 1. Age and sex distribution in study group (initial prothrombin concentration less than 50 per cent) as compared to control group.

ETIOLOGIC FACTORS

The age and sex distribution in the study and the control groups are compared in figure 1. The average age of the study group is 61 years and of the control group, 58 years. The ratio of males to females is almost identical in both groups.

In table 1 are shown the drugs recorded before the first determination of prothrombin. All agents listed in 4 or more cases are included. No drug or group of drugs appears to be related to the initial low prothrombin concentration in these cases.

TABLE 1

Drugs Recorded before First Determination of Prothrombin Concentration

(All Drugs Listed in Four or More Cases Are Included)

	HEPARIN	NITRO-GLY-CERINE	MOR-PHINE	DEMEROL	DIGITALIS	ATROPINE	PHENO-BARBITAL	SECONAL	PAPAV-ERINE	ASPIRIN
	per cent	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*
Study group (61 cases)	52	21	12	8	7	5	5	8	3	5
Control group (43 cases)	47	16	9	9	5	7	7	0	7	2

In figure 2 the incidence of fever in the 2 groups is compared. In each case the temperature used was the highest recorded after admission and during the 3 days preceding the first test for prothrombin. There appears to be no significant relationship between the body temperature and subsequent prothrombin concentration.

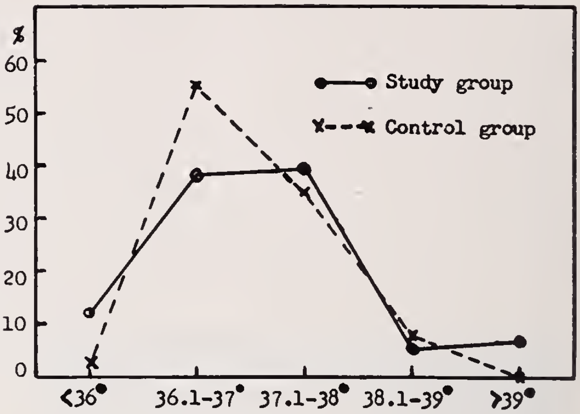

FIG. 2. Relationship of fever to initial prothrombin concentration.

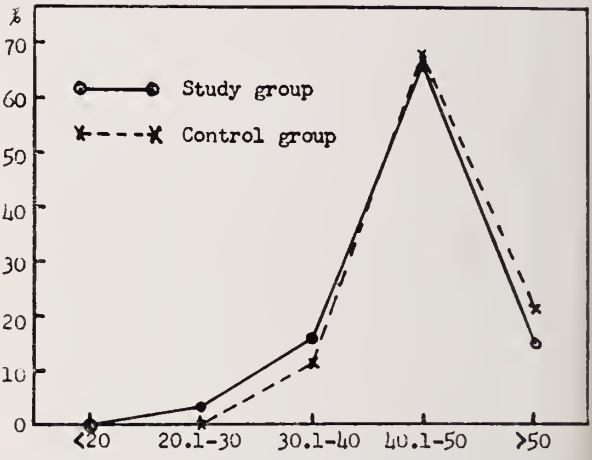

FIG. 3. Comparison of volumes of packed cells in low prothrombin group and in control group.

Anemia and hemoconcentration do not appear to be important factors in determining the level of prothrombin activity. In figure 3 the volumes of packed erythrocytes in the 2 groups are compared.

We considered the possibility that congestive heart failure, with attendant hepatic dysfunction, might be the cause of initially low prothrombin values (table 2). However, the incidence of edema (2 plus or greater) of the lower extremities was identical (7 per cent) in the study group and in the controls. Palpable enlargement of the liver, another gauge of congestive failure, was noted in 25 per cent of the study group and in 9 per cent of the control group.

TABLE 2

Relationship of Congestive Heart Failure to Initial Prothrombin Concentration

	EDEMA OF EXTREMITIES (2+ OR GREATER)	PALPABLE LIVER
	per cent	*per cent*
Study group (61 cases)	7	25
Control group (43 cases)	7	9

The greater frequency of hepatomegaly in the group showing initially low prothrombin values suggests a higher incidence of liver disorder in that group. Such observations have been frequently recorded. However, jaundice was not evident in any of the cases in which the prothrombin concentration was lowest (less than 30 per cent) and was noted in only 3 cases (6 per cent) in which initial prothrombin values were 30 to 49 per cent. Jaundice was not detected in any cases in the control group. The incidence of hepatomegaly and jaundice in the study series is too low to suggest that preëxisting liver disease is significant in this regard. It remains possible that liver dysfunction, probably related to right ventricular failure, is a factor in a small proportion of the cases.

It is of interest to note the other diagnoses that were recorded in these cases during the hospital period, and to compare the 2 groups in this respect. In table 3 are shown all diagnoses, in addition to myocardial infarction, occurring more than once in the 104 cases. In 43 per cent of the study group, as compared to 26 per cent of the control group, at least 1 additional diagnosis was given. Hypertensive cardiovascular disease occurred in 23 per cent of the study group, almost twice as frequently as in the control group. Thrombo-embolism was recognized in 7 per cent of the study group and in 2 per cent of the control group. Diabetes mellitus occurred almost equally in the 2 groups. Cholecystitis was infrequently listed in both groups. Bronchopneumonia, atypical pneumonia, and grippe each occurred once in the study group.

TABLE 3

Diseases Other than Myocardial Infarction Recorded during Hospital Period

	CONCOMITANT DISEASES	HYPERTENSION	THROMBO-EMBOLISM	DIABETES MELLITUS	CHOLECYSTITIS	RESPIRATORY INFECTION
	per cent	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*
Study group (61 cases)	43	23	7	10	2	5
Control group (43 cases)	26	12	2	9	5	0

Effect of Initial Prothrombin Level on Required Dicumarol Dosage

This study was also designed to show what effect, if any, the initial prothrombin value has on the therapeutic requirement for dicumarol. We have chosen 30 per cent or below as the prothrombin concentration indicating adequate anticoagulant effect. There were 35 cases in the study group and 20 cases in the control group in which this level of prothrombin was maintained for 1 week or longer. These were further subdivided, according to the initial prothrombin value. In each case the total dicumarol dosage was divided by the number of days of the therapeutic régime to determine the average daily dose.

From these data (table 4) it can be noted that the average required daily dose of dicumarol, and the median daily dose, is related directly to the initial prothrombin concentration, although there are exceptions in individual instances as shown by the range. In the group showing 30 per cent or less prothrombin concentration initially, 2 patients maintained that level without dicumarol.

TABLE 4

Relationship of Initial Prothrombin Concentration to Average Daily Dose of Dicumarol Required

INITIAL PROTHROMBIN CONCENTRATION BEFORE DICUMAROL THERAPY	AVERAGE DAILY DOSE OF DICUMAROL	MEDIAN DAILY DOSE OF DICUMAROL	RANGE OF AVERAGE DAILY DOSE OF DICUMAROL
	mg.	*mg.*	*mg.*
Less than 30% (8 cases)	40	45	0–84
30–49% (27 cases)	62	61	20–110
50–74% (13 cases)	66	67	41–95
75–100% (7 cases)	80	78	59–102

PROGNOSTIC SIGNIFICANCE

We have attempted to follow all patients included in this report. The attending physician was sent a brief questionnaire on each patient who survived after the hospital period. Satisfactory replies were obtained in 80 per cent of the study group and in 84 per cent of the control group. The length of the follow-up period was comparable in the 2 series.

TABLE 5

Relationship of Initial Prothrombin Concentration to Status of Patients 10–25 Months after Hospitalization

	KNOWN DEAD	LIVING, CONDITION SATISFACTORY	LIVING, CONDITION UNSATISFACTORY	STATUS UNKNOWN
	per cent	*per cent*	*per cent*	*per cent*
Study group (61 cases)	41	36	3	20
Control group (43 cases)	19	60	5	16

In table 5 the status of all patients at the end of the 10 to 25 months' period is shown. The mortality was significantly greater in the study group. This variation is not due to a difference in the age or in the incidence of hypertension in the 2 groups. In table 6 these factors and the mortality are compared.

In the follow-up questionnaire, specific inquiry was made about subsequent attacks of myocardial infarction, pulmonary embolism, and the occurrence of hemorrhage. The results are shown in table 7. The term "new myocardial infarct" signifies any infarction which developed after the one which brought the patient to the hospital originally. It can be noted that each of the complications listed occurred somewhat more frequently in the study group than in the controls. Hemorrhage, usually of minor degree (as from hemorrhoids), occurred in 4 cases. None of these patients was under anticoagulant therapy at the time the bleeding occurred.

TABLE 6

Mortality in Study and Control Groups as Affected by Age and by Hypertension

	TOTALS	AGE		HYPERTENSION
		30–59	60+	
Study group:				
Cases followed	49	21	28	12
Mortality, per cent	41	33	64	67
Control group:				
Cases followed	36	18	18	4
Mortality, per cent	19	17	28	50

TABLE 7

Relationship of Initial Prothrombin Concentration to Certain Complications in Follow-up Period

	NEW MYOCARDIAL INFARCTION	PULMONARY EMBOLISM	HEMORRHAGE
	per cent	*per cent*	*per cent*
Study group (49 cases followed)	24	8	8
Control group (36 cases followed)	19	3	0

SUMMARY

In a series of 136 cases of myocardial infarction the initial prothrombin concentration was less than 50 per cent in 61 cases (45 per cent), as

(*Continued on page 353*)

MYASTHENIA GRAVIS—A SURVEY*†

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ERB-GOLDFLAM'S disease, or myasthenia gravis, as it has more commonly been called since Jolly's studies[1] in the early 1890's, was first symptomatically described but not further delineated by Willis[2] in 1685. The observations of Erb[3] in 1878 and Goldflam[4] in 1891 fashioned a clinical entity from what had been a rather vague symptom-complex.

A large number of morbid states have been observed to precede myasthenia gravis or to be associated with exacerbations in the disease. These include pulmonary tuberculosis, encephalitis, syphilis, typhoid fever, diabetes mellitus, Banti's disease, exogenous and endogenous intoxications, upper respiratory infections, and emotional stress. The relationship has not always been clearly established and in some instances certainly has been adventitious. It has been noted, however, that emotionally upsetting events and upper respiratory infections have a deleterious effect on myasthenia sufficiently often to make the association convincing. Myasthenia gravis occurs in an age range from infancy to old age, with a large majority of the cases occurring in the 20 to 40 age group, 75 per cent of them before the age of 40. The disease occurs more often in females, but after the age of 40 it is much more common in males. After the age of 50 it is rare, and these late cases have been almost entirely in males. This has been one of the clinical observations which has aroused speculation as to the role of endocrine substances in the genesis of the disease.

Symptoms of the disease may (1) be present for a number of years before unwonted severity or diagnostic acumen disclose it; (2) develop suddenly in a severe form; or (3) more commonly, progress to the point of recognition of symptoms by the patient and diagnosis by the physician over a period of weeks or months. Fleeting paresthesias and/or pains (commonly eye pain) may precede or accompany the weakness. In order of frequency the most usually encountered symptoms and signs are: (1) ptosis of the upper lids and diplopia found in almost half of all patients, so that very often the specialist in diseases of the eye is the first medical man consulted; (2) general weakness involving all bodily movement but noted more readily by the patient as weakness of the arms and legs; (3) dysphagia and dysarthria; (4) and much less frequently, weakness of the muscles of the neck. The weakness is characteristically and diagnostically brought out by repeated movements of the part affected, so that fatigability takes its place with weakness as a cardinal symptom of the disease. An almost constant story is that the patient feels relatively well on awakening and gets progressively worse as the day goes on.

Approximately a third of all patients have remissions averaging 2 years but in unusual instances lasting 5 to 20 years. It has been stated by Harvey[5] et al that remissions are less likely to occur following institution of prostigmine therapy, but Viets[6] has not found this to be true in a large series of cases, and this author, as well as others, has found no correlation between the occurrence of remissions and other factors, such as duration of the disease.

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† This article has been reviewed in the Veterans Administration and is published with the approval of the Chief Medical Director. The statements and conclusions contained therein are those of the authors and do not necessarily reflect the opinion or policy of the Veterans Administration.

Since Goldflam[7] first described such a case in 1902 there have been a number of observations of the improvement or complete remission of symptoms of myasthenia gravis during pregnancy, especially in the last two trimesters. There are, however, exceptions ranging from transitory relapses, particularly during the first trimester, to persistent exacerbation throughout pregnancy. Severe relapses following an improvement during pregnancy have also been observed. It has also often been observed that many female patients experience an increase in symptoms during the first 2 days of the menstrual period.

The similarity between the muscular asthenia of hyperthyroidism and myasthenia gravis has often been pointed out, as well as the ineffectiveness of prostigmine in the former. There have also been published a number of cases whose exact number (16 to 25) will depend on the reader's judgment of the accuracy of the diagnosis (a number being made before the advent of prostigmine as a diagnostic aid in doubtful cases), in which hyperthyroidism and true myasthenia gravis were both present with usually dire results. Blackford and Freligh[8] in autopsies of 1,213 adults found no hypertrophied thymuses in nonhyperthyroids, whereas 50 per cent of those who died of exophthalmic goiter and 25 per cent of patients with hyperthyroidism with exophthalmos had enlarged thymuses. The relationship, if any, between hyperthyroidism and myasthenia gravis remains obscure.

Although much has been learned about the pathologic physiology of myasthenia gravis, the cause remains unknown in spite of intensive investigation. The disease has been reported in each member of a family of 4 brothers, and there have been a number of other cases in 2 brothers and 1 in identical twins, but the vast preponderance of nonfamilial incidence rules out serious consideration of familial or hereditary factors in most cases.

Many lines of evidence have pointed to the hypothesis of primary endocrine malfunction as the cause. These include the influence of the menstrual period and of pregnancy on the symptoms of the disease and its almost complete absence in postmenopausal women. The fact that approximately 50 per cent of all autopsied patients have been found to have enlarged thymuses either as thymomas or non-neoplastic hypertrophy, along with the spectacular cures following surgical removal of the thymus in some cases, has seemingly narrowed the search for the particular endocrine offender. The putative relationship between myasthenia and hyperthryoidism and the occurrence of thymic enlargement in a significant number of cases of the former disease have provided a further clue pointing to the thymus. However, many unquestioned cases of myasthenia gravis have no discernible thymic pathology, and removal of even frankly tumorous thymus glands has failed to benefit some cases. Also, no abnormal substance emanating from the thymus has been isolated from the blood of myasthenics, and efforts to reproduce the disease experimentally by the use of extracts of thymus have not been successful. Thus, the present conclusion must be that the role of the thymus in Erb-Goldflam's disease, though suggestive and provocative, has not been established and is not understood.

The essential defect responsible for the weakness and fatigability of myasthenic muscles is at the myoneural junction, where the transmission of the impulse from nerve axon to muscle fiber is, for some reason, ineffective. There are two principal hypotheses to explain this. One is that a curarizing substance is present, and it has been an attractive speculation to implicate the thymus as the source of this. However, there is no convincing evidence for this. The other explanation attributes the difficulty to a defect in the synthesis of acetylcholine, the substance formed at the motor nerve ending, which is responsible for the transmission of the impulse to the muscle fibril. The fact that the sera of myasthenics has been found to inhibit the in vitro synthesis of acetylcholine from its substrate favors the correctness of this hypothesis.

Of the drugs employed in the treatment of the disease, neostigmine acts to destroy the cholinesterase at the myoneural junction, thus allowing whatever acetylcholine is produced to be more effective. Ephedrine is a sensitizer of muscle acetylcholine, both directly and indirectly, by preventing inactivation of adrenalin, and guanidine and potassium are anti-curare substances.

Lymphorrhages in muscle have been found in two thirds of the autopsied cases of myasthenia. There have been no undisputed changes found in the central nervous system, and most reports are entirely negative. About 50 per cent of autopsied patients show an enlarged thymus. Non-neoplastic enlargement is found more often before the age of 35 and is often associated with the presence of germinal centers in the thymus. Of the tumors termed thymoma there has been found no histologic difference between those which metastasize and those which do not, and myasthenia gravis may occur in conjunction with either.

The test procedure most commonly and effectively employed for confirmation of the diagnosis suggested by history and physical examination is the intramuscular injection of 1.5 mg. of neostigmine methylsulfate along with 0.6 mg. of atropine to minimize unpleasant side-effects of neostigmine. Marked improvement, most easily observed where symptoms are most marked, takes place in 15 to 20 minutes following the injection in patients with myasthenia gravis. This test has assumed so important a role in diagnosis that the disease can almost be said to be defined by the reaction to neostigmine, and the failure to respond satisfactorily casts very serious doubt on any case no matter how closely other criteria may fit. Quinine and curare both increase the weakness of myasthenics, and this fact has been used for diagnostic purposes. However, the alarming side-effects which may occur vitiate the usefulness of these drugs. Faradic stimulation of the affected muscles produces contractions, brisk at first, then progressively more feeble to the point of extinction, the so-called myasthenic reaction. This is mirrored by the progressive decrease in amplitude of spike potentials with electromyographic recordings from successively stimulated myasthenic muscles.

Polyneuritis, the muscular dystrophies and atrophies, encephalitis, bulbar paralysis, and syphilis all have symptoms and signs which have a superficial resemblance to those occurring in myasthenia gravis, but these conditions usually present no difficulty in diagnosis on further investigation. The numerous psychoneurotic states in which weakness and fatigue are prominent symptoms represent a trap for the unwary. A moderate index of suspicion combined with a history of weakness relieved by rest and of remissions along with the prostigmine test should provide ample safeguards. The ocular manifestations of ptosis and diplopia existing in relative isolation from other manifestations of the disease may also cause confusion with such conditions as developmental aplasias of the oculomotor nerve nuclei in the brain stem and with multiple sclerosis. Time, by providing additional symptoms, is frequently a provident aid in cases in which the diagnosis had not been considered previously.

The unknown etiology of myasthenia gravis in conjunction with the frequent occurrence of spontaneous remissions has in the past given rise to quickly disappointed hopes with a host of drugs, now no longer used. Harriet Edgeworth,[9] herself a victim of the disease, in 1930 published the first paper on the use of ephedrine and its undoubted partial efficacy in relieving the symptoms of myasthenia gravis. The dosage which has been most commonly accepted is 25 mg. 2 or 3 times a day. Since insomnia may result from late afternoon or evening use of the drug, it is not commonly employed after 4:00 p.m.

The advent of prostigmine has now relegated ephedrine to the role of an adjuvant, but it continues to be of use in the treatment of the disease.

Physostigmine was first employed by Mary Walker[10] in 1934, and, though superseded by its synthetic analogue, neostigmine, because of the latter's relative freedom from side-effects, has established the present basic therapeutic approach to the disease. The majority of patients will be reasonably well controlled by 3 to 9 tablets of 15 mg. each a day, the interval being determined by therapeutic trial. The side-effects of prostigmine therapy, gastrointestinal cramps, nausea, diarrhea, and sialorrhea occur most frequently when the drug is taken on an empty stomach and are adequately controlled by atropine, 0.6 mg., or belladonna, 10 to 20 drops, taken 15 minutes before meals. Although 3 to 9 tablets control the symptoms in the majority of patients, the use of double or even triple this amount may become necessary because of the progressive course of individual cases or by the increased need brought on by concurrent physical illnesses such as upper respiratory infections. Indeed, oral administration may become impossible under such circumstances, and intramuscular administration becomes the only recourse. As much as 31 mg. hourly has been used in addition to such measures as tube feeding and in some cases the emergency use of a Drinker respirator.[11] The prompt use of antibiotics may forestall the occurrence of exacerbations induced by respiratory and other illnesses. The patient must be educated to the importance of consulting his medical attendant at the first sign of a cold or fever, and in general should be urged to lead a life as free as possible from excessive physical strain.

The use of potassium chloride as an adjuvant has been effective in many hands since its first trial in 1935.[12] The large variations in dosage and the occurrence of nausea and diarrhea when it is used may have detracted somewhat from its more common employment. None of the more enthusiastic advocates of its use[13] suggest less than 10 to 15 grams a day. It should be administered in a liquid, 6 or 7 teaspoons a day, so constituted that each teaspoon contains 2 grams.

The use of guanidine hydrochloride in a dosage of 125 mg. tablets, 8 to 10 times per day, has also been advocated by some workers. Most patients, however, report paresthesias of the lips and fingertips, and it is doubtful whether any real benefit is gained.

The need for an effective anticholinesterase with a more prolonged action than neostigmine has led to the investigation of a group of alkylphosphate compounds. The first of these, diisopropyl fluorophosphate (DFP), has an irreversible anticholinesterase action, pronounced side-effects, and a narrow margin of safety, and is no longer used in the treatment of myasthenia gravis. Two other compounds, tetraethylpyrophosphate (TEPP) and octomethyl pyrophosphoramide (OMPA), are less toxic although not as safe as neostigmine, and both have a relatively prolonged effect so that some cases have been controlled on 2 doses per day. However, neither drug is as effective as neostigmine, and neither has succeeded in replacing the latter drug.

The use of ACTH and cortisone has led to conflicting results in the hands of different groups of workers. Torda and Wolff[14] have reported significant partial remissions in 11 of 17 patients treated with ACTH. In each case the improvement began after the course of treatment with ACTH had been completed and was accompanied by enhanced ability of the blood serum to support acetylcholine synthesis and improvement in ergographic and EMG recordings. These results, however, are contradicted by the failure to bring about any improvement with either ACTH or cortisone in cases reported by others.

Thymectomy in the treatment of myasthenia gravis received its first impetus on report of a cure with successful removal of a thymic tumor by Blalock[15] in 1939. Improvements in surgical technic, drug management and the emergency use of the Drinker respirator have made operative mortality small. Although a considerable number of cases have been subjected to thymectomy and reported on by competent and experienced observers,[16-18] there is no unanimity as to the indications for the operation or as to results. Viets[6] has attempted a comprehensive review of the subject, and he feels that the results justify the continued use of thymectomy in selected cases. There seems to be little question that it should be done in cases in which thymic enlargement can be demonstrated by roentgenographic methods. However, the difficulty in assessing long-range results in a disease characterized by spontaneous remission must be kept in mind, and the operation should probably be withheld in those patients with few symptoms, those responding well to neostigmine no matter what the dose, most people over 40, and those particularly who experience wide swings of remission and relapse.

A surgical procedure which has reportedly given a large measure of relief, but the rationale of which is obscure, is carotid denervation. The French surgeons, Thévenard, Leger and Jourdy,[19] have reported its successful employment in 2 cases followed postoperatively for 2½ and 4½ years, respectively.

SUMMARY

The treatment of myasthenia gravis revolves about the use of neostigmine, the dosage of which is determined by the needs of the patient. A trial of ephedrine and potassium is clearly indicated as an adjuvant or supplement. Anticholinesterase drugs with a more prolonged effect than neostigmine and possibly ACTH merit interest and trial. Surgery is reserved for patients with thymic enlargement and possibly those not well controlled by neostigmine.

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TREATMENT OF LEAD ENCEPHALOPATHY WITH CALCIUM DISODIUM VERSENATE[*]

Report of a Case[†]

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IN VIEW of the need for better methods of treatment in lead encephalopathy, we are reporting the successful outcome of a case treated with a new metal complexing agent, Calcium Disodium Versenate.[‡]

Report of Case

E. A., a 3-year-old boy, was brought to the hospital on June 1, 1951, 20 minutes after he had suddenly begun to have convulsions while putting on his shoes. There had been no indication that he was ill until he began to have the convulsions. The past history was unrevealing at the time. Physical examination revealed a semicomatose child who was twitching or having tonic and clonic convulsions continuously. The temperature was 99.6°F., the pulse rate, 155, and the respiratory rate, 25 per minute. There was no nuchal rigidity. Babinski and Brudzinski reflexes were negative. The patient responded to pinprick by becoming rigid.

Laboratory examinations on admission revealed an erythrocyte count of 2,900,000 and a white blood cell count of 13,000 per cu. mm. of blood with a normal differential. The hemoglobin was 9.5 Gm. per 100 ml. The spinal fluid contained 21 cells per cu. mm., of which 4 were polymorphonuclear leukocytes. The spinal fluid protein was 112 mg., and the sugar was 50 mg. per 100 ml. A urinalysis was negative except for 4+ sugar (after 4 infusions of glucose). The carbon dioxide combining power was 39 volumes per cent.

In the admitting office the patient was given 7 grains of sodium amytal intravenously, and the convulsions were controlled. He remained lethargic the first day, with occasional twitching, but he twitched violently on being stimulated. He was given parenteral glucose and Hartman's solution. On the second day the lethargy abated considerably, and the patient tried to raise himself to a standing position but was unable to do so because of extreme unsteadiness and tremors. He took a normal diet fairly well and seemed somewhat improved for the next 2 days. On the third day the patient became comatose and began to have severe convulsions which were not amenable to barbiturate therapy but were controlled with drop ether. A spinal tap at this time revealed 3 polymorphonuclear leukocytes and 6 lymphocytes per cu. mm., with a protein of 180 mg. per cent and a sugar of 45 mg. per cent. Further questioning of the parents revealed that the child had eaten the paint from 3 window-sills in the past 8 months. X-ray films of the long bones revealed characteristic lead lines, and blood and urine analyses showed the presence of 0.417 mg./100 ml and 0.56 mg./liter of lead respectively. The child was put on a high calcium and phosphorus diet with supplementary vitamin D. For 3 days there were no more convulsions, but he was lethargic and twitched almost continuously, although he took his diet fairly well. On the ninth hospital day he was given 50 mg. of Calcium Disodium Versenate intravenously in 50 ml of 5 per cent glucose solution.[§]

The Versene solution was prepared by making a slurry of 29.2 Gm. of Versene acid and 10 Gm. of calcium carbonate, C.P., and 100 ml of water. To this was added slowly and with vigorous stirring 100 ml of 0.2 molar sodium hydroxide. After carbon dioxide evolution ceases; the material is in solution. The solution is made to 374 ml, which gives a solution containing 100 mg. of the Calcium Disodium Versenate per ml. Before autoclaving, this solution is neutralized to pH 7.4 by the addition of small amounts of dilute sodium hydroxide or acetic acid as needed. This solution was filtered and placed in small Erlenmeyer flasks for sterilization by autoclaving at 15 lbs. pressure for 15 minutes.

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[*] From the Research Foundation of Children's Hospital, Washington, D. C.

[†] A preliminary report of this case was read before the Conference on Lead Poisoning at the Massachusetts General Hospital, Boston, Mass., February 8, 1952.

[‡] Calcium Disodium Salt of Ethylene Diamine Tetra-acetic Acid.

[§] Now available for clinical trial from Riker Laboratories, Inc., Los Angeles, Calif.

There was no immediate toxic reaction. However, the patient's urine output, which had been slowly diminishing, continued to decrease and his blood pressure rose slightly, from 100/60 to 126/72. In view of the minimal information about the effect of Versene in humans, this therapy was discontinued. The blood pressure remained slightly elevated and the oliguria continued. The urine showed slight amounts of protein (60 and 30 mg. per cent) on the 2 succeeding days. There was slight pitting edema of the sacrum and some periorbital edema. Serum proteins at this time were 6.9 Gm. per cent, with an A/G ratio of 2.3. The blood nonprotein nitrogen was 35 mg. per cent (upper limit of normal for this laboratory) at the height of this episode. At this time, the eleventh hospital day, polychromatophilia and basophilic stippling were seen on the blood smear for the first time. There were 4 per cent reticulocytes. The stippling was seen for the last time on the thirteenth day. The edema subsided over the next 2 days, and the blood nonprotein nitrogen fell. The patient was lethargic and had slight episodes of twitching for the following 2 days, but on the fourteenth day he became more lethargic and twitched and had tremors steadily. The urine output had increased, the blood pressure had dropped, and the blood nonprotein nitrogen had come down to 21.7 mg. per cent. In view of the improved renal condition, and since the patient seemed to have more encephalitic signs, the Versenate therapy was reinstituted. Fifty mg. of the calcium salt was administered in 50 ml of 5 per cent glucose solution intravenously, and this dose was repeated 2 more times at 8-hour intervals. It was then doubled and was increased daily in 150 mg. per day increments, until the dosage on the 20th hospital day was 750 mg. per day in 3 divided doses (figure 1). The patient showed no recurrence of the oliguria or edema, and the blood pressure remained constant. The blood nonprotein nitrogen again rose to around 35 mg. per cent and remained there during therapy. The tremors and twitching, subsided on the first and second day of therapy, and the lethargy had completely disappeared by the third day. There was no recurrence of these symptoms. Therapy was discontinued after 12 days because of the marked improvement in the condition of the patient. A total of 6.5 Gm. of Calcium Versene had been given.

During the hospital stay almost daily spinal taps were done; these showed extreme fluctuations between 600 and 140 mm. of saline. When the pressure was elevated, fluid was removed cautiously until it dropped to around normal levels. After therapy with Versene the pressure rose over 160 mm. only 3 times. On one occasion, 4 days after cessation of therapy, it rose to 600 mm. and fell 140 mm. on the next day. There were no neurologic symptoms associated with any of these rises in spinal fluid pressure, but the patient was irritable at these times.

The remainder of the hospital stay was uneventful, except that the patient developed chickenpox in the sixth week.

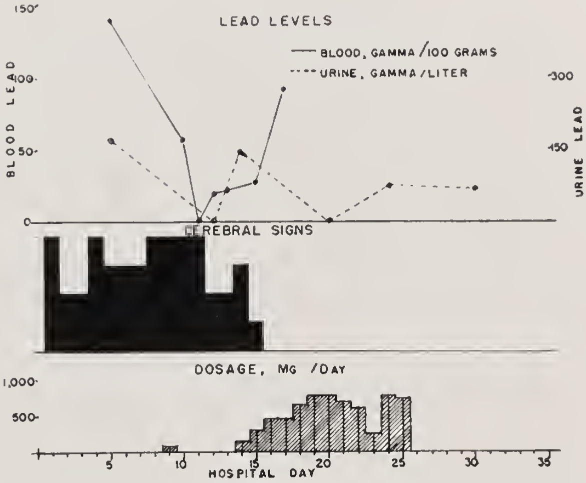

FIG. 1. Lead levels, cerebral signs, and dosage of Versene throughout course in hospital.

Blood and urine were collected almost daily, but an unfortunate accident caused the loss of most of the specimens during storage.

Follow-up observation of the patient over a period of 3 months reveals no neurologic sequelae. The patient is subject, however, to tantrums when thwarted. Otherwise his development seems to be continuing normally. The course of the patient's blood and urine lead levels and his signs of encephalitis, in relation to the administration of Calcium Versene, are shown in figure 1. The blood levels are given in gamma per 100 Gm. and the urine levels in gamma per liter. The encephalitic activity is shown on the basis of 4 levels shown as 1+ through 4+. Four+ level represents convulsions and coma, 3+ twitching and coma, 2+ intermittent twitching with lethargy, and 1+ slight twitching and hyperreflexia. As can be seen from the diagram, the patient's condition fluctuated from one level to another with recurrent episodes of severe convulsions. It cannot be proved that the patient was improved by the Versene therapy, since, with the exception of the fifteenth hospital day, on which his condition seemed to be worsening after 2 days of diminished activity, the general picture from the thirteenth day on was that his condition was improving. As has been stated, it was this sudden worsening of the patient's condition which caused us to reinstate Versene therapy. There were no signs of venous thrombosis or phlebitis in this patient even though he was given an intravenous drip containing Versene 3 times a day for 12 days. The patient showed no signs of severe discomfort any more than are evidenced by any child receiving 5 per cent glucose solution.

DISCUSSION

Versene has been used industrially for some years as a powerful complexing agent for metal ions. By the formation of strong metal-Versene chelates in solution, the metal ions are prevented from reacting in the usual manner. Application of these possibilities of selective ionic control by Versene to the study of physiologic systems is a recent development.[1] This is the first report of its clinical use in plumbism. Versene, a trade name for ethylenediamine-tetra-acetic acid (figure 2), combines with multivalent cations to form cyclic complexes in which the metals are unionized. The Versene was used in this case as the calcium complex, since it could then combine with no more calcium, thereby causing possible decalcification of the blood. The basis of the present trial of Calcium Disodium Versenate in lead poisoning rests on a combination of a number of previous observations. Administration of free Versene to animals and clinically has been shown to have a hypocalcemic effect due to the formation of the Calcium-Versenate complex and an acute toxicity dependent on the rapidity of this hypocalcemic action.[2, 3] The administration of the preformed calcium complex, on the other hand, is without significant toxicity.[4, 5] The binding of calcium in this complex is relatively weak and can be displaced in vitro by many other metals, especially lead, cobalt, nickel, chromium and copper.[6] The calcium-metal exchange reaction does not occur with uniformity in vivo, however, because, for some metals, there are present in the body complexing agents which form stronger metal bonds than does Versene.[7] The binding of lead, cobalt and nickel by Versene shows a favorable ratio, while that of copper and mercury is less strong than with the naturally occurring systems. Treatment of experimental poisoning by metals of the former group may be influenced favorably by Calcium Disodium Versenate, whereas no effect has been observed in the case of the latter group of metals.[8] These observations, coupled with the established nontoxicity of the drug in mice, rats, rabbits, dogs and humans, led us to a trial of the agent in the present instance.

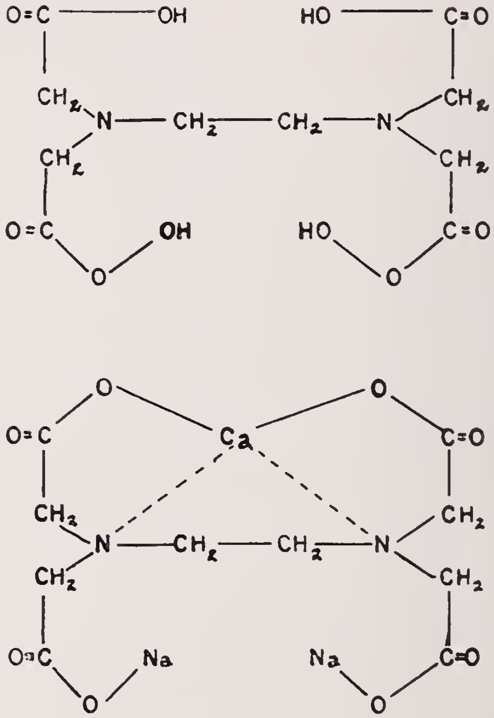

FIG. 2. Chemical composition of Versene.

Two aspects of the present case deserve comment. The complete absence of neurologic sequelae following lead encephalopathy is suggestive of some beneficial action attributable to the drug. Some substantiation for this view is drawn from the incomplete data on blood lead levels and lead urine excretion (figure 1). The initial levels of lead in the blood and urine are high and agree with reported levels in acute lead poisoning. The relation of the disappearance of lead from the blood and urine with subsidence of convulsions on the twelfth and thirteenth days and the roughly parallel increase of lead with exacerbation of symptoms on the fourteenth day is possibly significant. The sharp increase of blood lead with the administration of Versene agrees well with the experience in animals. This rise in blood lead without exacerbation of symptoms, even though the concentration of lead in the blood was in the range of severe toxicity, points to the relatively innocuous nature of the lead-Versene complex.

The case reported indicates that up to 750 mg. of Calcium-Versene can be administered intravenously daily to a 3-year-old infant without apparent toxicity. In retrospect we cannot believe that the 50 mg. of Calcium Versene administered on the ninth day caused oliguria and renal signs. It is more likely that this episode was due to the toxic nephritis seen in lead poisoning, particularly since the renal signs were beginning to develop prior to the administration of Versene. The interpretation of this is also favored by the additional evidence that the subsequent administration of up to 15 times the first dose was unaccompanied by toxic symptoms. The slight rise in the blood nonprotein nitrogen suggests that Versene, like a number of other nitrogenous compounds, competes with nitrogenous wastes for excretion. Certainly no signs of renal damage appeared during prolonged administration. We believe that the patient began to improve greatly on the administration of Versene and that the therapy was of significant effect in the case. The evidence on the subject, however, is incomplete and certainly requires further work to substantiate it. The relative rarity of lead encephalopathy and the innocuous nature of the therapy, together with the excellent theoretical basis for its use, prompt us to encourage other investigators to try this technic.*

SUMMARY AND CONCLUSIONS

1. A case of lead poisoning from the ingestion of paint from woodwork is reported.
2. The use of a chelating agent for lead, Calcium Disodium Versenate, for removal of active lead is described.
3. Evidence suggestive of the efficacy of the therapy is presented.
4. It is suggested that further study of this agent in plumbism is warranted.

N.B. We wish to thank Dr. Reginald Pascual and the Nursing Staff of Ward C-1A for their coöperation, without which this information could not have been obtained.

We wish to thank the Health Department Laboratory of Washington, D. C., for the initial determination of lead in blood and urine, and Miss Solange Gignac of Georgetown University Hospital for the remaining lead determinations.

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* Following this suggestion, Calcium Versenate was used in 3 cases of acute lead poisoning by Dr. Elston Belknap,[9] Milwaukee, Wis. The clinical results were excellent and in complete confirmation of the results in this case. Quantitative blood and urine lead quantitation, done in the laboratory of one of us (M. R.), conclusively correlated the positive excretion of lead with the elimination of the signs of clinical plumbism.

TREATMENT OF FLATFEET IN CHILDREN

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THIS discussion of flatfeet in children will be limited to the mild type of flatfoot which makes up the bulk of such cases seen by the family physician and pediatrician. The grossly deformed foot will not be considered.

The feet in this group differ only slightly from normal. It may be noticed at birth that the feet are abducted and everted. Feet are not considered flat simply because there is no arch. The infant has fat on the bottom of the foot which fills in the arch and gives it a flat appearance before he walks.

The chief characteristic of flatfoot deformity is the muscle imbalance. The normal foot is pulled equally in all directions. The flatfoot is held for long periods in an abducted and everted position.

In a flatfoot the common extensor and peronei muscles are in a shortened position and pull in a straight line. This lets them work at an advantage. The tibial muscles are stretched and pull at an angle and thus work at a disadvantage.

If nothing is done to correct the muscle imbalance, it becomes more fixed and a structural change takes place in the foot. When the child is old enough to stand and walk, weight is borne with the foot in a pronated position. There is little chance for a spontaneous correction of the deformity.

Treatment

If the flatfoot deformity is noticed before the baby walks, the parents are taught how to stretch the foot "down and in" to correct flatfoot deformity. When the baby is old enough to walk, some type of "swung-in" shoe is prescribed.

Many of the national shoe companies make a "swung-in" shoe for flatfeet under some attractive trade name. Most swung-in shoes have the same features. The forefoot is turned in more than in the normal shoe, and the heel is carried forward under the arch to give more support. The heel is raised an eighth of an inch on the medial border. Some makes of shoes are swung-in more than others. Since some shoes are more rigid than others, a choice is available.

Swung-in shoes alone may be all that is needed in the very mild flatfeet. Mild cases are those which show an arch when the infant is sitting, but when weight is borne the arch is obliterated and the feet capsize over into a pronated position.

The swung-in shoe adducts the forefoot to the midline or turns it in slightly beyond. The lift under the medial border of the heel turns the heel from a slight valgus to a slight varus position. This position allows the muscles on the medial side of the foot to pull in a more direct line and to work at an advantage.

Severe flatfoot deformity is recognized by a more persistent muscle imbalance and a more fixed structural change. These feet will not be corrected by swung-in shoes alone. In addition to the swung-in shoes manual stretching is needed. The stretching turns the forefoot down and in, placing it in an over-corrected position. This stretches the muscles and ligaments on the lateral side of the foot and relaxes those on the medial side of the foot. The foot is manually turned in further than the swung-in shoe can turn it, and further than the child can turn it as he uses the foot.

In order to accomplish anything by the stretching the mother must be carefully taught how to hold the foot. She cannot do it with the baby in her lap. She must use both hands to stretch the foot. One hand holds the forefoot and the other the heel. Stretching the foot is like straightening a wire which is bent. To straighten

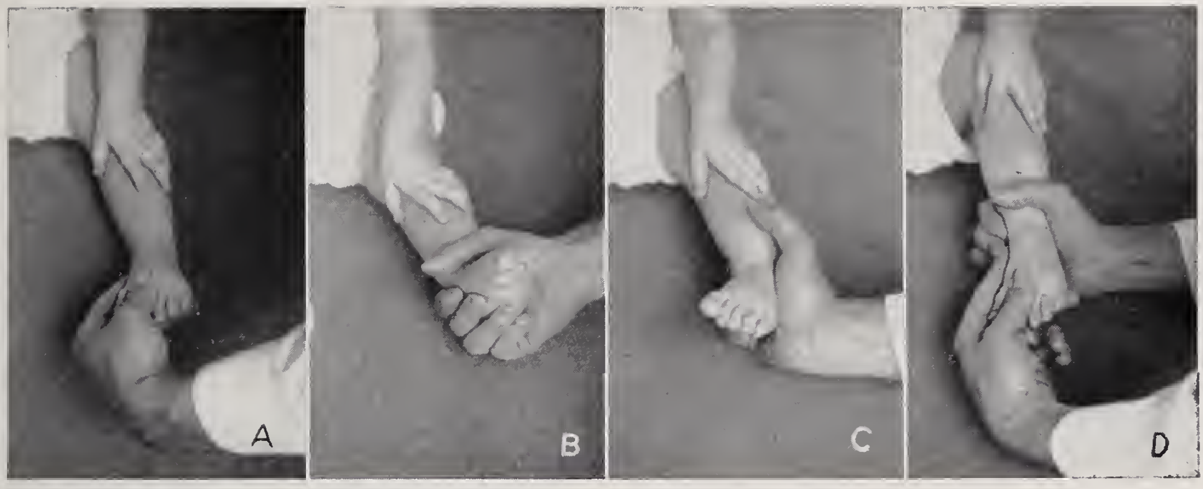

FIG. 1. (A) Method of stretching foot to correct flatfoot deformity. The ball of the foot is placed on the flexed middle finger. The thumb grasps the forefoot between the first and second metatarsals. The index finger finds the tubercle of the navicular, which is a pea-sized bone on the medial side of the foot about half way between the base of the great toe and the tip of the heel. This bony prominence is pressed into the foot, as the forefoot is turned down and in. The object of the stretching is to bend the foot in the middle; thus, the heel must be held with the other hand.

(B) The heel is grasped deep in the palm. This shows that the heel, which is in a valgus position, must be turned inward into a varus position.

(C) The heel is shown inverted. The heel must be held firmly if the foot is to be bent in the middle.

(D) The grip on the forefoot and the heel is combined. The middle finger of the hand holding the heel is made to press on the index finger of the hand on the forefoot. This doubles the pressure which is made inward on the middle of the foot. This position restores an arch to the foot and stretches the ligaments on the lateral side of the foot. The forefoot is carried inward further than the swung-in shoe can carry it and further than the child can turn it.

the wire each end must be grasped and the wire bent in the middle. The same is true for the foot. Some err by grasping the forefoot and leg and simply twisting the ankle joint. This puts a strain on the ankle joint and accomplishes nothing. To correct a flatfoot deformity a firm grip must be made on the heel to keep it from turning out in abduction when the forefoot is adducted. By holding the forefoot and heel the foot can be bent in the middle and an arch restored to the foot.

TECHNIC

The baby is placed on its back and the mother stands facing the feet. The forefoot on the right is grasped by the mother's right hand. The ball of the foot is placed on the flexed middle finger. The thumb is placed on the dorsum of the foot between the first and second metatarsals. This leaves the index finger free to feel along the medial border of the foot and to find the tubercle of the navicular, which is about half way between the base of the great toe and the tip of the heel. This bony prominence is about the size of a pea. The mother may run her finger over this prominence into a slight depression beyond and come back on the prominence. She is instructed to push this prominent bone into the foot, pushing it straight across toward the lateral side of the foot (fig. 1-A).

A firm grip is taken on the heel by the left hand (fig. 1-B). The heel is placed deep in the palm. The fingers grasp the medial side of the heel. The heel which was in a valgus position is turned inward to a varus position (fig. 1-C). The middle finger of the left hand is made to press on top of the index finger of the right hand, which is making pressure on the tubercle of the navicular. In this way pressure can be made twice as easily on the medial border of the foot, the foot bent in the middle and the flatfoot deformity corrected (fig. 1-D).

In stretching the foot care is taken to turn the foot inward as far as it will go without hurting the child. If too much force is used, the child struggles and kicks, and the mother soon dis-continues the treatment. The foot should be held gently, simply taking up the slack and carrying the forefoot in a little further. The foot is not wiggled but is held steadily, as a cast would hold it. It is held for about half a minute and released for an instant to rest, and then held again. Each foot is stretched for about 5 minutes night and morning.

The mother is told that in the more severe cases a cast is needed. A cast can do the job better because it holds the foot in the corrected position day and night for 7 days a week. Since the mother does not want her baby to wear a cast if it can be prevented, she works faithfully on the stretchings. The better she has been instructed, the more she will accomplish.

The child is examined every 2 or 3 months and the mother again checked on her manipulations. A heavier or lighter swung-in shoe is ordered as indicated by the progress made. Seldom is it necessary to raise the medial border of the heel more than an eighth of an inch.

Foot plates are avoided if possible. However, for the foot which is still more severely deformed and which bulges in along the medial border and breaks down the shoe and runs the heel over into a valgus position, a metal foot plate is used. This is made by the brace maker for the individual patient. It is made to fit snugly in the swung-shoe. The shoe holds the foot on the foot plate in the desired position. The metal arch support keeps the shoe from breaking down on the medial side. When the supports are properly adjusted they can be worn in comfort. The plates can be used for a couple years before they are outgrown.

When the child is old enough to coöperate, he is taught exercises. With him sitting, he is taught how to turn the foot down and in and up, pulling it up with the anterior tibial muscle, and holding it for the count of 10. This is repeated a given number of times. With him standing, he is taught to stand pigeon-toed and to come up on the tiptoes and hold it for an instant and return. This is done a given number of times. With him still standing pigeon-toed he is next taught to come up on the lateral border of the feet and to hold it for an instant, and to do this the same number of times. If the heel cords are short, a fourth exercise is taught. The patient stands near a wall and leans forward and touches his chest to the wall. He must stand pigeon-toed and must keep his heels tight on the floor. More stretch can be put on the Achilles tendons by standing a little farther from the wall.

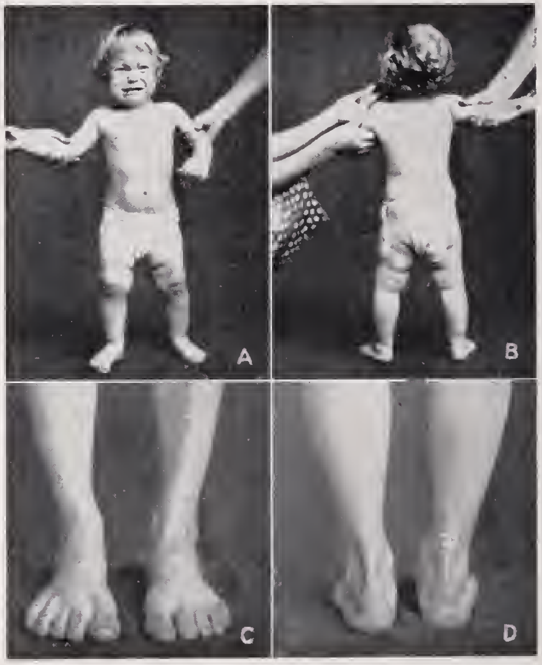

FIG. 2. (A and B) Flatfooted girl of 15 months. She was treated with swung-in shoes for 5 years.

(C and D) Twenty years later the feet are free from trouble.

If the feet do not respond to the above treatment, they can be corrected by casts. The cast is changed every week or two for 6 to 8 weeks. Then the above treatment is resumed.

By this method of treatment some will develop normal arches, which will be retained when they walk barefooted or in normal shoes. Others will not develop an arch but will be free from pain and will have no foot trouble. The author has treated about 2,000 cases by this method in the last 25 years. Some have been followed into adult life (fig. 2). The results have been quite satisfactory.

(*Continued on page 354*)

President's Page

SOCIETY AND THE PHYSICIAN

XII. Society and Our Medical Society

This has been a good year. We have started a new type of scientific program calling for fewer and more purposeful meetings. We have initiated the Midwinter Seminar, which promises to be an increasingly useful and informative meeting as the years go on. We have pioneered in the Conference on Teaching Technics with outstanding success. We have established a closer liaison with the Commissioners of the District and with the Health Department. We are increasingly recognizing interprofessional relationships as evidenced by our meetings with the lawyers and with the pharmacists. We have faced several "social problems" with yet undetermined results.

Your "almost ex-President" has had a good year, too. Besides the many meetings and the occasional headache, I shook the hand of Princess Elizabeth (soon thereafter to become Queen Elizabeth), and later the hand of Queen Juliana. I attended more dinners and banquets than any one person (except our good Executive Director) deserves to attend. I had excellent coöperation and thoughtful help from all upon whom I called. These are a few of the compensations of the office in addition to the honor of serving as president.

I would be reluctant to close this last President's Page without saying again some of the things I've said before. We are an unusually fortunate profession serving an unusually blessed people. To this people we have a primary responsibility. In carrying out this responsibility, we must work unselfishly and diligently, and strive to be leaders in all matters affecting the health of our patients and our Nation. I feel sure that your patients would rather have their physician planning their medical future than all the "social planners" who are making such strenuous efforts to plan it for them. It's up to us.

Frank D Costenbader

Editorials

CANCER REPORTING REGULATIONS PROMULGATED

The Board of Commissioners of the District of Columbia issued the necessary regulations for reporting cancer and other malignant growths as authorized by Public Law 83 on April 22, 1952. They read as follows:

"REGULATIONS RELATING TO THE REPORTING OF CANCER, SARCOMA, LYMPHOMA (INCLUDING HODGKIN'S DISEASE), LEUKEMIA, AND ALL OTHER MALIGNANT GROWTHS:

Section 1. Any person in charge of any hospital, clinic, detection center, public or private pathology laboratory or X-ray laboratory in the District of Columbia and all persons licensed to practice the Healing Arts in the District of Columbia shall report within 30 days from the date of diagnosis thereof the existence of any case of cancer, sarcoma, lymphoma (including Hodgkin's disease), leukemia or any other malignant growth in the District of Columbia to the Director of Public Health. Such report shall be in writing, on report forms provided by the Health Department, and shall contain the full name, address, age, sex, race, diagnosis, and such other pertinent information necessary for statistical purposes as may be called for therein.

Section 2. The reports of cases made pursuant to Section 1 hereof shall be confidential and not open to public inspection. The information in such reports shall not be divulged or made public so as to disclose the identity of any person to whom they may relate, except upon order of court, and unless already published shall be divulged or made public only on the written authorization of the Director of Public Health. Such reports shall be used for statistical and public health purposes only.

Section 3. Any person violating any of the provisions of these regulations shall on conviction thereof be punished by a fine not to exceed $100.

By order of the Board of Commissioners, D. C."

A Cancer Register has been maintained by the Cancer Control Bureau of the District of Columbia Health Department. The reporting heretofore, however, has been on a purely voluntary basis with a biased picture of the District of Columbia cancer situation resulting. With the promulgation of the above regulations practitioners have a basis in law for reporting all malignant diseases and are thus assured of the confidential nature of all such reports. With a complete record of all cancer patients in the District it will be possible to make analyses and studies of the various factors affecting the cancer problem.

Copies of the necessary forms will be mailed to each practitioner, and anyone needing additional forms may secure them from the Bureau of Cancer Control, D. C. Health Department, Room 4154, 300 Indiana Avenue, N.W., or by calling the Bureau, National 6000, Extension 2697. For the convenience of users, forms will also be available in the Bureau of Vital Statistics, Room 1025, near the Third Street entrance of the Municipal Center.

Pathologists or radiologists may secure special forms for reporting cases. Any questions regarding the reporting of cancer will be gladly answered by the Bureau of Cancer Control.

John R. Pate, M.D.
Acting Director, Bureau of Cancer Control, D. C. Health Department

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

MEDICAL CIVIL DEFENSE—PRESENT AND FUTURE

For purposes of Civil Defense, strategists have designated some 50 critical target areas. Of these, 31 lie in a geographical parallelogram, with Minneapolis, St. Louis, Richmond, and Boston at the corners. Should an attack be launched, the best that American air defense can hope to accomplish, according to Air Force Chief of Staff, General Hoyt S. Vandenberg, is to knock down 30 per cent of the enemy force—"even if we had many more intercepting planes, anti-aircraft guns, and a radar screen that blanketed all approaches to our boundaries." One can readily see, therefore, that a large percentage of enemy planes would get through. This poses only one phase of the problem. There are other devastating weapons, often referred to as the invisible ones, germs, gases, and radioactive poisons. Because much information regarding these latter remains highly secret, defense measures against their use cannot be included in our present planning.

What, then, would an atomic bomb attack mean?

At a recent Command Post exercise, a single atom bomb was dropped theoretically at 9th and G Streets, N.W. at noon. The casualties at that hour from this single bomb, calculated from Federal population figures, were 48,049. The dead doubled this figure.

The first problem that concerns us as professional men is the care and treatment of casualties. Contemplating this appalling picture of death and desolation, it is all too easy to fall into the attitude of— 'as long as we can't prevent an attack, about all we can do is hope that it won't happen—if it does, we will all be dead anyway.' This, of course, is dangerous thinking. Actually, much can be done if we are adequately prepared. When atomic scientists said, "There is no defense against atomic bombs," they meant only that there is no specific counterweapon.

Medical Care Services of Civil Defense in the District of Columbia has steadily maintained that a great number of casualties can be materially reduced by:

1. Proper warning.
2. Proper shelter and instruction to the people, thereby preventing panic, one of the greatest dangers of any disaster.

The Services is composed of four divisions, each headed by a physician, as follows:

Emergency Casualty Division, Dr. William D. Claudy.

Hospital Division, Dr. Robert C. Rush.

Medical Evacuation Division, Dr. Cyrus H. Maxwell.

Medical Resources Division, Dr. Luther W. Gray.

Now then, what has been planned, and where do we go from here?

Since an atomic bomb disaster would most likely occur within the heart of the city, five zones radiating out and away from the critical area have been set up. These zone boundaries have been designated on a master map. Each of these zones functions as a unit with a Zone Control Center and a Medical Liaison Officer. Because of the physical pattern of this plan it is best described as a web defense. It is designed to facilitate the employment of Civil Defense personnel by decentralizng the command to the Zone Controller. The Medical Control Center has been placed in the Northwest Section of Washington. This Center is to be equipped with operational maps, radio, and telephonic communications. A special radio wavelength has been designated for all medical activities. From this Center will emanate instructions to the Zone Control Center, requests for mutual aid (from neighboring areas), supplies and mobile support.

The Medical Resources Division, headed by Dr. Gray, is charged with the procurement and assignment of personnel, medical supplies, and the blood and blood substitutes program. A list of available physicians, dentists, pharmacists, and other allied personnel will be maintained. Some of these individuals have already received their assignments. More assignments will be made as soon as requests for them are made by the units involved.

Thus far, $120,000 has been appropriated for the purchasing of certain supplies and equipment, intended primarily for the Casualty Aid Stations. The problem of packaging and storing these supplies, which are in transport, has been turned over to the wholesale drug houses, in charge of Mr. F. Royce Franzoni, President of the D. C. Pharmaceutical Association. We realize that these purchases represent a small amount of the total needed, but at least we can say it is a start.

Within each zone has been designated a Supply Point, which will act as a receiving center for Federal Civil Defense Administration supplies as well as a distributing point for the zone needs. A complete supply catalog has been prepared for both the Casualty and Hospital Divisions. It is contemplated that a 24-hour supply of matériel be maintained, the remainder to be drawn as needed from the Federal Supply Points designated by the Eastern Seaboard.

Some $40,000 will soon be made available for the processing of plasma for Civil Defense. This will permit some 9,000 pints to be initially produced. The Gallinger Hospital Blood Processing Center is now operating and will augment this Civil Defense supply. It is anticipated that more funds will be made available to increase the quantity of this vitally needed item.

Under the leadership of Dr. Claudy, the Emergency Casualty Division has arranged and spotted its stations throughout the Metropolitan Area. Thirty-seven of these stations are located in the District of Columbia, 31 in Maryland, and 21 in Virginia. They represent the first line of defense in the event of a bombing. Upon their medical units will fall the initial work load. Most of the personnel for these units have been assigned.

The Hospital Division, headed by Dr. Rush, estimates that atomic bomb casualties of all types would create a need for 40,000 hospital beds. A survey of existing hospital facilities shows a total bed capacity at the present time of approximately 6,000 and expansion facilities for only 10,000. Assuming that these hospitals could safely evacuate 75 per cent of their normal patient load immediately after an attack, a large number of beds would still have to be provided. For this purpose, the Hospital Division has drawn up plans for three types of installations:

1. Existing hospitals.
2. Improvised hospitals (each 1,000 beds, located in local high school and elementary school buildings).
3. Regional reserved hospitals located in the surrounding counties.

The tactical employment of these hospitals has been divided into the five zones corresponding to those initially outlined in the web defense. In addition to these three types of hospitals the Hospital Division is also responsible for furnishing two other installations, surgical teams to be assigned on call to the Emergency Casualty Division, and several kinds of holding units to aid the Medical Evacuation Division. The buildings to be used as hospitals have been designated and approved by the school authorities. Assignments to the existing hospitals, either as a primary or alternate site, have been made. It remains now for the hospitals to organize and outline the areas of special activities within the designated school buildings. Some of the personnel assignments for the temporary hospitals have been made. A great deal more remains to be done.

The Medical Evacuation Division, under its Chief, Dr. Maxwell, is charged with the major task of evacuating the wounded. It is coöperating with the Transportation Service in its planning, and Evacuation Control Centers and Evacuation Roads have been designated and charted.

Despite these hopeful signs of activity, the Civil Defense group feel that they have only scratched the surface; that our defense is still too piecemeal to do the job adequately. Deficiencies have been found in at least three phases of our operation: volunteers, vital emergency stockpiles, and public awareness. The lack of funds and the general lack of public interest, which in turn influences Congressional action, are major obstacles to be overcome if Civil Defense is to succeed. The local problem becomes even more pronounced when it is realized that the entire budget program for the District is dependent upon Congress in lieu of a state legislature. In the future, it is our hope that more interest, more funds, more supplies, and a general public awareness will be forthcoming in order to insure some measure of success for Civil Defense.

Finally, even the most comprehensive and detailed plans will collapse unless everyone knows what he is supposed to do and does it intelligently and promptly. If there is even a few minutes' warning of an attack, and if everyone performs his assignment, many lives can be saved.

Alfred E. Brigulio, M.D.
Coördinator for Medical Care Services, Office of Civil Defense, District of Columbia

AMERICAN MEDICAL EDUCATION FOUNDATION

Since the end of World War II, rising costs, inflation, decreased income from endowments, and fewer large benefactions have created major financial problems for the medical schools of the United States. The problem has been compounded by the call on the schools during this same period to expand their enrollments and to make provisions in their teaching programs for the rapid advance of medical science and a broadened concept of medicine's role in the community. In recent years ample and unprecedented sums have been made available to the schools for research, but support of basic teaching budgets has failed to keep pace with essential needs.

Convinced that an active program for additional financial support would have to be undertaken if the medical schools were to continue to provide the Nation with an adequate number of well-trained physicians, several groups in 1948 began a serious study of methods of raising funds on a national scale for the support of medical education. These groups, which included leaders of the medical profession, medical educators, university presidents, and outstanding public citizens, joined together in the spring of 1949 to sponsor the establishment of the National Fund for Medical Education. The objective of this organization is to raise annually from the medical profession, business, industry, labor, agriculture, and other groups substantial sums for the unrestricted use of the medical schools in support of their teaching programs.

With a group of distinguished leaders in American life serving as trustees, under the honorary chairmanship of former President Hoover, the National Fund held its first meeting in May, 1949. It was agreed at that meeting that no public announcement should be made until the Fund was fully organized and a substantial nucleus of contributions had been secured.

By late 1950 the organization of the Fund had advanced to the point where it became desirable to plan a definite program for securing contributions from the medical profession in support of the Fund. In December, 1950 the American Medical Association appropriated $500,000 as a nucleus for the sum to be raised by the medical profession in 1951. A few weeks later the Association sponsored the establishment of the American Medical Education Foundation, a not-for-profit corporation under the laws of the state of Illinois. The purpose of the Foundation is to provide an instrument through which individual physicians, state and county medical societies, and other professional organizations can make contributions in support of medical education.

The first meeting of the American Medical Education Foundation was held in Chicago on February 14, 1951, at which time a constitution and by-laws was adopted.

Dr. Elmer L. Henderson, former President of the AMA, was made president of the American Medical Education Foundation, and at this meeting plans were initiated for a fund-raising campaign and for making distributions to the medical schools through the National Fund for Medical Education. A most important decision was taken when a request was made to the AMA's Board of Trustees that the American Medical Association underwrite all the operating and administrative expenses of the Foundation. This request was generously granted by the Trustees, with the result that every dollar contributed to the Foundation can be passed on in full to the medical schools.

At the initial meeting of the Directors arrangements were also made to request the Commissioner of Internal Revenue to rule that contributions to the Foundation would be deductible for income tax purposes. A ruling to this effect was made by the Commissioner in the spring of 1951.

The American Medical Education Foundation is having a drive again this year. More detailed information concerning its work will be sent to the membership in its regular mailings.

Alan Frank Kreglow, M.D.
Chairman, Committee on Medical Education Fund, The Medical Society of the District of Columbia

SUPREME COURT RULES IN FAVOR OF OREGON MEDICAL SOCIETY

The United States Supreme Court in a seven to one decision, April 28, dismissed an appeal of the Government against the Oregon State Medical Society, eight county medical societies, Oregon Physicians Service, and several physicians who are or were officials of these organizations. Previously a U. S. District Court had ruled against the Government's antitrust violation charge and a direct appeal had been taken to the U. S. Supreme Court.

The controversy in Oregon began in 1936 when the Medical Society opposed contract practice of medicine sponsored by private firms and commercial insurance companies. At that time the Medical Society charged that medical treatment and service was dependent upon company approval and in some cases the advice of physicians was disregarded. The Medical Society raised the ethical objection that third parties were entering the doctor-patient relationship. The Medical Society, in an effort to bring about reform of prepaid medical service within the state, decided in 1941 to render itself such service on a nonprofit basis. After seven years of successful operation of the Society plan the Government brought suit, charging the Society with monopolizing the business of providing prepaid medical care within the state.

The Supreme Court said at one point, "Objections of the organized medical profession to contract practice are both monetary and ethical. Such practice diverts patients from independent practitioners to contract doctors. It tends to standardize fees. The ethical objection has been that intervention by employer or insurance company makes a tripartite matter of the doctor-patient relation. Since the contract doctor owes his employment and looks for his pay to the employer or the insurance company rather than to the patient, he serves two masters with conflicting interests. In many cases companies assumed liability for medical or surgical service only if they approved the treatment in advance. There was evidence of instances where promptly needed treatment was delayed while obtaining company approval, and where a lay insurance official disapproved treatment advised by a doctor."

And at another point the Court said, "Since no concerted refusal to deal with private health associations has been proved, we need not decide whether it would violate the antitrust laws. We might observe in passing, however, that there are ethical considerations where the historic direct relationship between patient and physician is involved which are quite different than the usual considerations prevailing in ordinary commercial matters. This Court has recognized that forms of competition usual in the business world may be demoralizing to the ethical standards of a profession."

Mr. Justice Clark, who was formerly the Attorney General of the United States, took no part in the consideration or decision of the case, probably for the reason that the Government suit was commenced during the time while he was serving as Attorney General.

Mr. Justice Black, the lone dissenter, did not write a minority opinion. The majority opinion was written by Mr. Justice Jackson.

—*Washington Office, AMA Bulletin, May, 1, 1952*

THE EARLY CARE OF INJURIES OF THE GENITOURINARY TRACT*

Injuries of the Kidney

Injuries to the kidney range from a mild contusion without rupture of the capsule through all grades of rupture and crushing to complete severance of the vascular pedicle. There may be no other injuries or there may be accompanying injuries, such as lacerations, fractures of ribs, limbs or skull, puncture wounds, etc. The kidney may not be the only internal organ damaged, and in many instances the injuries to other organs are more important than that to the kidney.

Injuries to the kidney result from (1) falling against a rail or other edge, (2) collision with others in sports such as football, baseball and hockey, (3) a blow on the abdomen or flank by a piece of machinery or falling object, (4) crushing injuries, as between cars, (5) automobile, coasting, and skiing accidents, and (6) gunshot wounds.

Diagnosis is usually not difficult. The appearance of blood in the urine in any amount, large or small, combined with the history of injury and pain in the flank, is usually sufficient. Usually other findings are present, such as tenderness and perhaps tumor in the kidney region, rib fracture, or local body lacerations.

It is more difficult to determine the severity of the injury to the kidney, and for this pyelography is essential. Excretory pyelography often shows only nonfunction of the affected kidney; but retrograde pyelography, if feasible, will usually show the extent of rupture and of destruction of the normal pelvic architecture.

Treatment is directed, first, to the saving of life and, second, to the conservation of renal tissue and function.

The patient's general condition is the most important guide to the immediate treatment. If the general condition is good and remains so, with normal or rising blood pressure and no evidence of increasing or serious hemorrhage, a period of quiet rest is the best treatment. Especially in children, this should not be cut too short. If the pyelograms show no great deviation from normal renal architecture, both the patient and his kidney may be expected to recover completely.

If the condition at first is good but deteriorates, with falling blood pressure, evidence of increasing hemorrhage and a growing mass in the flank or upper quadrant, or if the patient is in collapse when first seen, transfusions should be given and the degree of renal injury determined by pyelography. If this shows no great deviation from normal, it is still advisable to refrain from operation and trust to rest and further transfusion, since most of such patients will recover. A few may require operation later because of perinephric abscess, cyst, or hydronephrosis.

When the pyelogram reveals that the kidney is blasted beyond recognition, and especially if signs of progressive hemorrhage are evident, prompt nephrectomy is indicated, provided the patient's general condition will permit. Experience has shown that nephrectomy in the presence of severe shock is very often fatal. In the case of gunshot wounds with concomitant bowel perforation the whole attention should be given to the bowel and no attempt made to repair or remove the kidney unless the patient is an excellent surgical risk.

In summary, it is safe to say, first, that the great majority will recover without operation, but there is a small group in which the kidney has been irreparably damaged and must be removed; second, operation on the kidney during shock is absolutely contraindicated; and, third, retrograde pyelograms give essential information often not obtained from excretory pyelograms.

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* This is the eleventh in a series of articles especially prepared for the Committee on Trauma of the American College of Surgeons and distributed by the Committee through its Regional Committees.

Injuries of the Bladder

Except for the penetrating wounds of warfare and the occasional accidents of pelvic and transurethral surgery, rupture of the urinary bladder almost always occurs as a complication of fracture of the bony pelvis. Fully 95 per cent of bladder ruptures encountered in civilian practice are from this cause. Indeed the coincidence is so classical that in every case of pelvic fracture bladder rupture should be suspected and immediate examination carried out lest it be overlooked and hours of serious urinary extravasation occur before it is discovered.

With the pubic arch or one of the pubic rami splintered, a spicule of bone cuts or pierces the bladder wall in front. Accumulated urine within the bladder flows out into the loose areolar tissue of the space of Retzius from tonic bladder contraction, and thereafter that which is excreted continues to extravasate. After only a few hours of this leakage, extensive extraperitoneal extravasation of the pelvic cavity occurs, with severe phlegmonous destruction of the infiltrated tissues and extreme general toxemia from local absorption. In these rare instances in which the bladder fundus is ruptured, the leakage is intraperitoneal and, surprisingly enough, far better tolerated than when the perivesicular structures are infiltrated.

The symptoms of bladder injury are often obscure until such time as extensive extravasation has occurred. Unless bladder injury is suspected, the deep pubic distress can easily be mistaken for the pain of the pelvic fracture. Occasionally persistent bladder spasm occurs with so-called bloody anuria, i.e., frequent attempts at voiding but passing nothing but a few drops of blood. Far more often than not, if bladder injury is not suspected and adequate examinations not made, the situation will go unrecognized until board-like rigidity of the lower abdomen develops from peritoneal irritation. Meantime, increasingly profound general symptoms develop.

The diagnosis depends entirely upon direct examination. Every patient with pubic fracture should be catheterized at once. If a catheter enters readily, the urethra is not seriously damaged. If some quantity of clear urine is obtained, the bladder is not damaged. Indeed, one may then be certain that no injury has occurred anywhere throughout the urinary tract. If a sizable quantity of urine is obtained, even though it may be bloody, there is reasonable assurance that nothing worse than bruising of the bladder wall has occurred, and an indwelling catheter for a few days is all that may be necessary. (Excretory urograms should, of course, be done to exclude renal injury causing the bleeding.) If the catheter enters the bladder readily and nothing is obtained but a little watery or clotting blood, bladder rupture is almost a certainty.

The simplest means of confirming the diagnosis of bladder rupture is both time-honored and, if done under proper sterile technic, quite safe. A measured quantity of sterile water (perhaps 200 c.c.) may be injected through the catheter and, if little or none can be recovered, bladder rupture is almost certain. If the exact amount can be recovered, bladder rupture is not likely to be present. Although this simple procedure is quite useful as a makeshift, there is room for error, and it is far better, when possible, to use a small amount of opaque medium commonly used for intravenous urography, adding it to 200 c.c. of sterile water, and to make a cystogram (anteroposterior and semilateral). Diffusion of the dye in the extravesical tissues, of course, cinches the diagnosis.

The treatment of bladder rupture entails two things, and the quicker they are accomplished the better. First, further extravasation must be stopped at once by an emergency cystostomy. Second, all of the loose areolar tissue in front and at the sides of the bladder presenting the telltale watery appearance of extravasation must be opened widely by finger dissection and drained by multiple Penrose drains. Although far less urgent than either of these, some attention should be paid to the bladder injury itself. Usually this amounts to nothing more than a small puncture wound in the front of the bladder wall that can be closed with a single stitch or even used as the cystostomy opening if near the midline. Unless extravasation has been unusually extensive the drains can be withdrawn gradually after a few days and a Foley bag catheter exchanged for the cystostomy tube until the wound has healed.

Injuries of the Male Urethra

Injuries of the male urethra require early recognition and prompt treatment. The immediate danger is shock and extravasation. Minor injuries may heal spontaneously, whereas severe injuries are surgical emergencies. They may be divided into 2 groups: (1) anterior urethra, which includes the bulbous portion, commonly involved in straddle injuries, and (2) posterior urethra, more often involved in fractures of the bony pelvis.

SYMPTOMS AND DIAGNOSIS

(1) Blood at the meatus is the earliest and most common sign. (2) Retention of urine occurs in severe injury. (3) The swelling of urinary extravasation may be seen in the perineum, scrotum, or lower abdomen if the patient has urinated. (4) Rectal examination is valuable in posterior urethral injury. In complete rupture the prostate is rendered movable and dislocated upward. (5) Catheterization is imperative to determine the degree of injury but must be done with utmost gentleness and strict asepsis.

TREATMENT

If catheterization is possible, a Foley bag catheter should be left indwelling to prevent voiding with the danger of extravasation. (If clear urine in quantity is obtained, there is assurance that injury of the bladder has not occurred.)

If a catheter will not pass, it is evidence that complete rupture has occurred. Two problems at once present themselves: first, extravasation of urine and, second, reëstablishing continuity of the urethra. Fortunately an asthenic retention often occurs and the patient is seen before he has extravasated his torn tissues by voiding. In such an event immediate cystostomy must be done. If delay is unavoidable, suprapubic trocar puncture is justified.

If the patient has already extravasated his tissues by voiding, immediate cystostomy still is indicated to avoid further extravasation. At the same time, wide incision and drainage of the extravasated areas must be done to prevent massive tissue sloughing and infection.

With the bladder open a sound can be passed from within outward to meet a second sound passed into the urethra. Holding metal on metal the outer sound can be guided past the fault in the urethra and advanced into the bladder. The heel of an ordinary catheter may then be pushed tightly onto the tip of the sound and drawn back out of the urethra. The tip of a Foley bag catheter may then be stitched to the plain catheter and drawn into the bladder and inflated. It is left indwelling for 2 or 3 weeks as a splint over which the urethra will bridge and heal. It also offers perfect bladder drainage so that the cystostomy drain can be removed in a few days and the wound allowed to heal.

Injury of the female urethra is uncommon. A catheter can usually be passed and may be left in place for 5 to 10 days, depending upon the extent of injury.

IMPORTANT ANNOUNCEMENT

Users of medical diathermy equipment will be interested in knowing that the Federal Communications Commission has proposed an amendment to Section 18.51 of the Commission's Rules and Regulations in so far as they apply to medical diathermy equipment, the manufacture and assembly of which were completed prior to July 1, 1947. The amendment would change the date of the applicability of Part 18 of the Rules and Regulations from June 30, 1952 to June 30, 1953.

INJURIES OF THE EXTERNAL GENITALIA

Closed wounds, such as contusions or rupture of the penis, are treated expectantly. Large hematomas should be evacuated under rigid asepsis.

In open wounds of the penis and scrotum, general surgical principles apply. Restore normal conditions as far as possible. If the testis is avulsed, but the blood supply is intact, replace it in the scrotum. Primary repair is usually possible, and seemingly hopeless wounds will often heal without difficulty. The following procedure is recommended:

1. Cleanse with soap and water, and irrigate with saline.
2. Save every bit of viable skin. It is seldom necessary to trim skin edges.
3. Control hemorrhage. Compression may be applied to the penis over an indwelling catheter. Sutures may be necessary in bleeding from the corpora.
4. Close without drainage, using absorbable suture to the skin of the scrotum. If the skin is totally denuded and inadequate for closure, apply fine mesh vaseline gauze and arrange for early split-thickness skin graft.
5. Protect with antibiotics and administer antitetanus therapy.

PROCEEDINGS OF THE ANNUAL BUSINESS MEETING

Dr. Frank D. Costenbader, President of the Medical Society of the District of Columbia, presided at the Annual Business Meeting of the Society, May 7, 1952. The annual "Reports of Officers, the Executive Board, and the Board of Censors for 1951–1952," which had been mailed previously to the membership were accepted by the Society without reading. Dr. Raymond T. Holden, Chairman of the Executive Board, presented the Supplementary Report of the Executive Board, which was approved in part. (See report following Proceedings. Accompanying footnotes indicate action taken on items which were not approved as recommended by the Board.)

At the close of his report, Dr. Holden presented Dr. Costenbader with a gavel inscribed with his name and the term of his presidency, a gift of the Society to the retiring President.

Annual Report of the Chairman of the Executive Board

In his annual report to the Society, the Chairman summarized the principal activities and actions of the Executive Board. The regular monthly meetings of the Board are held on the fourth Monday of each month. Because of the urgency of many of the problems confronting the Board this year, there have been several special meetings. A multitude of matters have been brought before the Board for its attention; among them were an amendment to the Constitution and By-laws concerning members charged with committing a crime; the appointment of a Medical Advisory Committee to the Laborers' Union; the creation of a special committee to revise the Constitution and By-laws; a resolution submitted to the membership to vote upon, which stated that no physician shall be denied membership because of race, creed or color; fluoridation of city's water supply; and a study of the Reorganization Plan for the District of Columbia.

The Chairman presented to the Society for permanent membership 69 Active, 40 Associate, 1 Affiliate, and 6 Resident-Intern members. These were accepted into the Society's membership.

He reported with regret the passing of 25 members during the past year. They were: Drs. Charles M. Beall, W. Sinclair Bowen, Irving M. Cashell, Coursen B. Conklin, Bernard I. Dietz, Thomas J. Dugan, Custis Lee Hall, Henry H. Hazen, Joseph Horgan, Howard Henry Howlett, Oscar B. Hunter, Philip Jaisohn, William J. Lally, Philip Litvin, Francis X. McGovern, J. Ernest Mitchell, Brayton O. Myers, William H. Norton, Ralph A. Quick, W. Warren Sager, Francis A. Saint Clair, Mark P. Schultz, Ruell A. Sloan, David W. Tastet, and Aloysius W. Valentine.

In closing the Chairman described his term of office as "a pleasant and a very rewarding experience."

"These are difficult times for everyone and officers of the Society are no exception. I have always found them a conscientious group who take their responsibilities very seriously. It seems an appropriate time for me, therefore, to assure members of our Society that their affairs are not only in competent, but dependable hands. No body of men could be more intent upon performing their duties to the best of their abilities. They have only one objective and that is to do what is best for the medical profession and the people of this community."

Following his report members of the Society accorded the Chairman a rising vote of thanks for his services.

Report of the Secretary

The Secretary made his report this year as brief and readable as possible in the hope, he said, that it would be widely read.

STATE OF THE SOCIETY

There has been a considerable increase in the number of members in the past five years, especially in the Active and Associate categories. The comparative figures on May 1 for the past 10 years follow:

	1942	*1947*	*1952*
Active	856	1,130	1,306
Life	60	82	77
Associate	211	232	383
Honorary	7	11	19
Affiliate	—	—	12
Resident-Intern	—	—	13
Total	1,134	1,455	1,810

The membership luncheons are now accepted as a part of the Society's activities. Seven luncheons were given in the Society's library since last May, with an average attendance of 20. Most of those invited were new members, but there was also a considerable number of older members. The primary purpose of the luncheons is to create a more personal relationship between members and the Society's officials.

Detailed financial reports were presented at the March business meeting of the Society. At the close of 1951 the General Fund showed a net income of some $14,500 before depreciation. Of this amount, $4,475 was expended for replacements and improvements in the Society's building and other capital investments. There was also a satisfactory net income in the MEDICAL BUREAU and MEDICAL ANNALS funds; the ANNUAL SCIENTIFIC ASSEMBLY fund showed a small deficit, but less than $50.

The Executive Board voted to consolidate the checking accounts of the General, MEDICAL BUREAU and MEDICAL ANNALS funds into one account in order to lessen the work of the bookkeeper.

The purchase of the property at 1720 M Street, N.W. had not been consummated, contributing factors being the sudden death of Dr. Oscar B. Hunter, who was holding the property, and the varying views of the House Committee and the members of the Board as to the wisdom of making the purchase. The funds obtained from the sale of bonds for this purchase have been transferred to a savings account in the Union Trust Company, the amount being $19,750. These funds can only be disbursed for the purpose for which they were subscribed.

ACTIVITIES OF THE SOCIETY

Due to lack of attendance, the Wednesday night meetings were abandoned for 1951–52 and two large medical meetings held in their stead, the ANNUAL SCIENTIFIC ASSEMBLY and the MIDWINTER SEMINAR. This was done too to reduce, in a substantial degree, the excessive number of medical meetings in Washington.

The 22nd ANNUAL SCIENTIFIC ASSEMBLY of the Society was unusually successful, the Secretary reported, not only from the standpoint of attendance but of interest. The total registration was 3,307 with physicians, interns and medical students comprising more than two thirds of those present. The balance of the registrants was divided almost equally between nurses, dentists, pharmacists, and exhibitors, and the miscellaneous guests. One of the new features of the ASSEMBLY was the Round Table Discussions. These discussions received such enthusiastic reception that they will be continued in 1952.

The first MIDWINTER SEMINAR was held in the Society's building on February 20 and 21. Dr. Darrell C. Crain, Acting Chairman of the Program Committee, and members of his committee prepared an excellent program. In fact, everyone who attended the sessions, which were held in the afternoon and evening, was enthusiastic in his praise of the speakers, all of whom were Washington physicians. However, the attendance was disappointing. Many members felt that the lack of interest was due to the newness of the venture, and that many more would attend if it were given next year.

The Conference on Medical Teaching Technics, which was suggested to the Executive Board by Dr. Hugh H. Hussey, was attended by some 160 physicians who paid a registration fee of $10 each The program was exceptionally interesting, no expense having been spared to obtain the finest talent available. A large share of the credit for the Conference's success must go to the physicians who "sold" this meeting to their colleagues.

The Secretary commented briefly on the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA, the Society's official journal. The advertising revenue of the ANNALS was maintained at a very satisfactory level in 1951, 55 per cent of it being obtained through the AMA's State Journal Advertising Bureau, the remainder from advertisers in Washington and vicinity.

There was no change in the editorial staff. Dr. Wallace M. Yater continued as Editor, Theodore Wiprud, as Managing Editor, and A. Louise Eckburg as Assistant Editor. Other members of the Editorial Board are: Drs. Roger M. Choisser, Frank D. Costenbader, Hugh H. Hussey, Winfred Overholser, Herbert P. Ramsey, R. Lee Spire, Donald Stubbs, Joseph S. Wall and Charles Stanley White.

The Secretary attended most of the meetings of the Board of Trustees of Medical Service of the District of Columbia. The Service's financial situation has improved materially in the past year; in fact, it was never sounder. Too much credit, he said, cannot be given Participating Physicians for their coöperation during the plan's financial difficulties.

The Service maintained a healthy growth throughout the year. At the close of December, 1951, there were 321,504 persons entitled to benefits under the plan and 1,210 Participating and 227 Coöperating Physicians. While subscribers' payments were increased on March 1, 1952, the benefits to which they were entitled were broadened. Certain procedures can now be performed in the doctors' offices.

MEDICAL BUREAU has continued to render invaluable service to physicians and the people of Washington. It was under heavy pressure during the months of March and April due to the publicity it had received and an epidemic of virus infections.

On March 1, 1952, the BUREAU had 722 subscribers, 388 to Alternate Listing Service and 334 to Telephone Secretarial Service, a total increase of 20 subscribers since March 1, 1951.

At the present time approximately 66 per cent of the Society's Active membership are covered by Group Hospitalization benefits through the Doctors' Group. On March 1, 1952, the number of subscribers totaled 1,024, as compared to 945 on March 1 last year. In terms of physicians and dependents the Doctors' Group numbers 3,432.

ACTIVITIES OF THE SECRETARY

The Secretary served as secretary of all the committees of the Society. He also took an active part in a number of civic, professional, and governmental organizations, some of which he served in the following capacities: Co-chairman, Medical Advisory Committee to Civil Defense for the District of Columbia; Associate Medical Advisor to the Director of Selective Service of the District of Columbia; member, American Bar Association's Special Committee for Improving the Administration of Justice; member, Executive Committee of the District of Columbia Survey of Medical Care of the Indigent and Related Services; member, Advisory Committee to the Home Care Program of the District Health Department and the United States Public Health Service; member, Advisory Committee of the Committee to Study Nursing Needs and Resources in the District of Columbia; member, Health Section of the United Community Services and a member of UCS's Hospitalization Committee; and member, Board of Trade's Committee on Public Health.

The Secretary attended the State Medical Journal Conference in Chicago, November 12 and 13, 1951, and was moderator for an afternoon session. He gave two lectures, April 1 and 8, at Howard University School of Medicine, where he spoke to the senior students on the "business side" of medical practice.

In conclusion, the Secretary expressed his deep gratitude for the friendly coöperation of the officers and members of the Society. He also mentioned the loyalty and efficiency of the staff in the Society's Executive Offices.

ELECTION OF OFFICERS

All nominees for office which were presented by the Nominating Committee to the Society at its business meeting, March 5, were unanimously elected to office. They are:

President-elect: Herbert P. Ramsey
First Vice President: Maurice A. Selinger
Second Vice President: Cecile L. Fusfeld
Member of Executive Board: W. Ross Morris
Member of Board of Censors: Fred O. Coe
Delegate to American Medical Association: Raymond T. Holden
Alternate Delegate to AMA: Herbert S. Gates

Dr. Wallace M. Yater will assume the office of President of the Society on July 1, 1952. Dr. Ramsey will take office on July 1, 1953. With the exception of the delegates to the AMA, all officers of the Society begin their duties on July 1. Dr. Morris will serve for four years on the Executive Board and Dr. Coe for three years on the Board of Censors. Dr. Holden and Dr. Gates were elected for a two-year period beginning January 1, 1953.

Following the election of officers, the new President-elect was called upon to make a few remarks. He expressed his appreciation to the members of the Society for the honor bestowed upon him. He assured those present that the Society would be well represented in the House of Delegates of the AMA since both the delegates chosen were able and qualified representatives.

REPORT OF THE BOARD OF CENSORS

The Chairman of the Board of Censors reported a modest increase in membership again during the year 1951–52. The membership now stands at an all-time high of 1,810 members.

Since May 1, 1951, the Board has interviewed 105 applicants for membership. It has recommended the election of most of these applicants, and in every instance where such recommendation has been made, applicants have been elected by the Executive Board.

Two physicians were recommended by the Board for Honorary membership: Major General George E. Armstrong, Surgeon General of the United States Army, and Major General Harry G. Armstrong, Surgeon General of the United States Air Force.

Considerable of the Board's time is devoted to interviewing applicants but there is no substitute for seeing and talking to applicants personally. It is a most important procedure in determining the physician's fitness for membership.

SUPPLEMENTARY REPORT OF THE EXECUTIVE BOARD

There are always items of business which cannot be included in the Annual Report of the Chairman of the Executive Board because printers must have copy at least ten days in advance of the mailing date, which is usually a week before this meeting. As a result, actions of your Board at its April meetint are incorporated in this Supplementary Report.

Matters dealt with in the Report are of unusual importance. Your Board has given a great deal of thought to them and it hopes that you will concur in its recommendations.

Election of Major General Harry G. Armstrong to Honorary Membership: Your Board proposed Major General Armstrong, Surgeon General, United States Air Force, for Honorary membership at a business meeting of the Society on February 21, 1952. At that time the Board presented a brief biographical sketch of General Armstrong, directing attention to his contributions to aviation medicine which won for him the 1939 Collier Award and the 1941 John Jeffries Award.

Since the above date the Board's proposal has been considered by the Board of Censors. It joins the Executive Board in recommending Major General Harry G. Armstrong's election to Honorary membership.

Adoption of Amendment XXII to the Society's Constitution and By-laws: This Amendment was incorporated in the Executive Board's report at the April 16 business meeting of the Society. Objections were raised at that time to the omission of any provision for hearings following charges against a member for "gross misconduct or gross violation of the duties, obligations and regulations imposed upon that member by the Constitution and By-laws of this Society."

This prompted your Board to request an opinion of its legal counsel, Mr. Warren E. Magee. Mr. Magee was of the opinion that if the proposed Amendment were adopted the requirement for hearings set forth in Chapter VIII, Article VIII of the Society's Constitution and By-laws would still be in effect. Despite Counsel's opinion the Board has decided to recommend to the Society that the proposed Amendment be amended by substituting "Chapter VIII Article VIII" for "Amendment XI" in the first sentence and striking the lines in italics, retaining only those portions relating to charges against a member "by any competent authority with the commission of a crime involving moral turpitude," and the procedure to be followed in suspending a member.

AMENDMENT XXII

Chapter VIII, Article VIII

Amendment No. XI of the Constitution and By-laws is hereby amended by the addition thereto of the following:

Section 3. Should any member of the Society be charged by any competent authority with the commission of a crime involving moral turpitude, *or should any member be charged in writing with gross misconduct or gross violation of the duties, obligations and regulations imposed upon that member by the Constitution and By-laws of this Society*, the Grievance Committee may report thereon to the Executive Board of the Society and may recommend the suspension of any or all privileges of such member until the determination of such charge or charges, provided that the Grievance Committee shall first determine and report to the Executive Board that such suspension is in the best interests of the Society.

The Executive Board, on receipt of a recommendation from the Grievance Committee for suspension of a member may, by a vote of two thirds of the full membership of the Board, vote to suspend the privileges of such a member until the charge or charges against such a member is or are determined, if the Executive Board concurs in the recommendation of the Grievance Committee and determines that such suspension is in the best interests of the Society.

Should the charged member be found not guilty of such charge of crime, or should the charge terminate in his favor, without a conviction, *or where charges are brought against a member under this Constitution and By-laws, should such charges be determined in favor of such member, then* the Executive Board shall promptly revoke its action *suspending the privileges of such member* and shall restore all membership privileges to such member.

On conviction of a member of a crime involving moral turpitude, *or should such member be found guilty of charges brought as aforesaid under the Constitution and By-laws of the Society, then* the Executive Board shall have the power to continue such suspension permanently or for a lesser period, in addition to any other disciplinary action which may be taken by the Board under Chapter VIII of the Constitution and By-laws. The right of appeal *of any member* from such final decision of the Executive Board as provided in Chapter VIII of the Constitution and By-laws shall remain inviolate.

Your Board recommends the adoption of this Amendment as amended.

Action on Purchase of Property at 1720 M Street, N.W.: At a meeting of the Society on November 9, 1949 your Board recommended the purchase of the property at 1720 M Street, N.W. which is to the west of this building and adjacent to it. This property had been purchased by the late Dr. Oscar B. Hunter at the request of the Executive Board with the understanding that the Society would purchase the property from him at a later date.

At the same meeting, the Board recommended that bonds be issued by the Society in the amount of $25,000.00 maturing in ten years and bearing interest at the rate of 3 per cent to finance the purchase.

Both of these recommendations were approved by the Society. The sale of the bonds, however, progressed very slowly. At the present time $19,750.00 in bonds have been sold. Failure to sell the entire issue delayed the acquisition of the property and negotiations were brought to a halt by the death of Dr. Hunter in December of last year.

The current House Committee has given consideration as to what should be done with the Society's property at 1710 M Street, N.W. and the desirability of acquiring 1720 M Street, N.W. If you have read the Annual Report of the Chairman of the Board, you know that the Committee was not in favor of acquiring 1720 M Street, N.W. because the Society did not have funds to remodel both this building and the one at 1710 M Street, N.W. The Committee proposed that the comparative cost of adding two floors to the building at 1718 M Street, N.W. or rebuilding the structure at 1710 M Street, N.W. be explored. If either of these were feasible, that purchasers of Society bonds be asked to approve the use of funds derived from this source for this purpose.

The Board requested the Finance Committee to review the recommendations of the House Committee. The Finance Committee did not concur in the recommendation that the Society abandon the plan to purchase 1720 M Street, N.W.; however, it agreed that a firm of architects be employed to advise the Society on what should be done.

This advice was forthcoming recently in a letter from the firm of Justement, Elam and Darby. Mr. Darby, who investigated the possibilities suggested by the House Committee, wrote the Society as follows:

1. Adding one or more stories to the front or office portion of existing building at 1718 M Street to provide additional office space. Mr. Darby did not think this feasible for several reasons including the fact that it would be very costly to remodel the building to comply with D. C. code requirements.

2. Remodeling the building at 1710 M Street to provide office space on upper floors. This would require razing the present building and erecting a new one on the site. If a new building were contemplated, the architects stated, and if it were to pay its own way, it should be an eight-story building and the cost would be $420,000.

3. Purchasing the property at 1720 M Street. This residence, Mr. Darby suggested, should not be purchased because of the difficulty of remodeling and the narrow width of the lot on which it is built, which is 18 feet. "We strongly advise against the purchase of this building."

After considerable discussion the Board came to the conclusion that it would recommend to the Society that the property at 1720 M Street, N.W. be not purchased at this time and that the bonds sold to members for the purpose of acquiring this property be retired on the next interest date.*

Referendum on April 2, 1952: At the March 5 business meeting your Board reviewed our Society's relations with the Medico-Chirurgical Society of the District of Columbia, Inc. and the discussions which had been held from time to time in regard to the admittance to membership of Negro physicians and finally the taking of an opinion poll authorized by the Society.

At the Annual Business Meeting on May 2, 1951 the Board, in its Supplementary Report, under the heading "Survey of Society Opinion on Membership of Negro Physicians" reported that "1,381 Active and Life members" had been sent forms. On April 1, 1951 966 members had "voted." Of this number 674 voted "yes," 290 voted "no," and 2 forms were not counted because the "votes" were qualified.

As promised at the March 1951 business meeting, the Board notified the Board of Censors of the result of the poll. No comment was made by the Executive Board in transmitting this information.

Shortly after the above report was made, four applications were received from Negro physicians. These were handled in the routine manner and finally reached the Board of Censors. The applicants were interviewed and thereafter the Board of Censors considered what action it should take. It was their conclusion that while the Society's Constitution and By-laws did not prohibit the election of any qualified physician, regardless of race, that in its 134 years of existence no Negro physicians had been elected to the Society. The Board did not feel that in the circumstances it could act on the basis of an opinion poll. It urged that a formal vote be taken which would in effect be a mandate to the Board of Censors.

This matter came before the Executive Board at its meeting on December 17, 1951. All members of the Board of Censors were present. The latter stated their views and the Board voted to recommend to the Society that a formal vote be taken on the following resolution:

"RESOLVED, that no qualified physician applying for membership in the Society shall be denied membership because of race, creed or color."

Shortly before the vote, which was held on April 2 in the Society's building, your Board appointed the following tellers: Drs. Harry Zehner, Robert H. Groh, William H. Hanna, and Alexander L. Russell. The tellers were instructed to check off on a membership roster the names of members who voted, as is done in the election of officers when there is more than one candidate for an office. Ballots were impounded in a locked box to be opened in the presence of the tellers at a later date.

It became evident on the day the referendum was held that a comparatively small proportion of the membership had voted. This was a source of concern to your Board because if the vote were too small no one would be satisfied with the outcome, regardless of whether a majority of the votes cast were for or against the resolution. It was therefore decided to call a special meeting of the Board, which was held on April 16.

Following considerable discussion, the Board voted that the number of members who had voted on the referendum on April 2 be ascertained and if less than one half of the membership had voted, it be recommended to the Society that the referendum be declared invalid and the ballots be destroyed without tallying; and that a mail vote be then taken, the results of which, if more than one half the members voted, be considered a mandate of the Society with respect to the election of physicians to membership without regard to race, creed or color. The Board agreed further that tellers be instructed not to count the ballots in the April 2 referendum until the Society acted upon its recommendations. If the Society agrees with the Board, the ballots will, of course, be destroyed without being counted.

As the membership roster used in checking off the names of those who voted had been locked and sealed in the ballot box the box was opened at the request of the President for the purpose of removing the roster but in no way disturbing the ballots. This was done by Drs. Robert H. Groh and Harry Zehner, as they were the only tellers available. It was then learned that only 271 members had voted.

Your Board believes that it would be a great mistake for the Society to accept this vote regardless of what the tabulation disclosed as a mandate of the Society. It is true that the failure of many to vote is disappointing. The reasons offered are varied and many of them are perhaps not valid. Nevertheless, your Board feels that in the interest of the welfare of our Society it must recommend that a mail vote be taken and that it be taken in the following manner:

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* The Society voted to recommit this recommendation to the Executive Board, giving the Board full power to act for the Society after a satisfactory agreement has been reached with the Hunter Estate.

1. That ballots be prepared on which will be shown the resolution previously voted upon and a place to indicate whether the member favors or opposes it. Furthermore, that this ballot be numbered and that the tellers who shall be appointed immediately will see to it that all but numbered ballots are destroyed.

2. That these ballots be mailed to all Active and Life members together with a plain, self-addressed envelope. That members be requested not to write their names on return envelopes.

3. That letters received which obviously contain ballots be opened only in the presence of the tellers to be appointed by the President.

4. That the ballots be mailed to the membership on May 20 with the request that they be returned not later than June 16.

5. Finally, that the results of the balloting be made known to the membership as soon following June 16 as is possible and that a majority in favor or opposed shall constitute the decision of the Society.

Again, your Board feels certain that the Society would regret accepting the small vote cast in the recent referendum regardless of what the tally revealed. It hopes that you will approve of its recommendation that a mail vote be taken.

Recommendations of Special Committee on Health and Accident Insurance: Your Board can say without reservation that no committee of the Society has been more conscientious and more aggressive in carrying out its duties than the Special Committee on Health and Accident Insurance.

The Committee has submitted to your Board the result of several months' labor, a description of a group health and accident policy written jointly by the Continental Casualty Company of Chicago and the American Casualty Company of Reading, Pennsylvania. Your Board is favorably impressed and will give its final approval when it has had an opportunity to read the policy to be issued. The Society's legal counsel will also review the policy.

What your Board seeks now is authorization for the insurance companies to canvass the membership in an effort to obtain the required number of subscribers to form a group in accordance with an agreement with the insurance companies. If you approve this recommendation the policy will not become effective until approved by the Board. Your Board also asks authorization to sign an agreement with the insurance companies that when 50 per cent of the insurable members have subscribed, the benefits and premium rates agreed upon become effective.

Your approval of these recommendations will make the group policy available to members at an early date.

Resolutions re Medical and Hospital Benefits for Veterans and Their Dependents and Transfer of Seriously Disabled Veterans to VA Installations: At its meeting on April 28, the Board considered a communication from Dr. George F. Lull, Secretary and General Manager of the American Medical Association, in which he called attention to a special committee which had been created by the AMA's Board of Trustees to study and report on the following: (a) medical and hospital benefits for veterans with nonservice-connected disabilities; (b) medical and hospital benefits for dependents of service personnel, and (c) the transfer of seriously disabled service personnel from service hospitals to Veterans Administration installations. He asked that our Society notify him as to any official action or policy taken by our organization.

The Board voted to instruct the Society's delegates to the American Medical Association to introduce a resolution that would place the Society on record as follows:

(a) The Society favors action looking toward the reduction of medical care to veterans with nonservice-connected disabilities except where the inability to provide for such service can be demonstrated.

(b) That further study be given the provision of medical care to dependents of service personnel.

(c) The Society favors the transfer of seriously disabled veterans from service hospitals to Veterans Administration installations.

Recommendation re Confirmation of Dr. Aris Carpousis: Because of its importance to the individual concerned and because of its unusual nature, the Board wishes to make all the facts in this matter clear to the Society.

To begin with, it is important for you to know that the Chairman of the Executive Board in his Annual Report for 1950–51 listed the name of Dr. Aris Carpousis as one of those who had completed his probationary year and who was recommended for confirmation by the Society. When your Chairman's Report came up for adoption by the Society a motion was made from the floor that if the list of probationary members included Dr. Aris Carpousis, action on his confirmation be deferred without prejudice to him. The motion was seconded and carried.

The motion and its adoption came as a surprise to members of the Board, most of whom did not know Dr. Carpousis. There followed an investigation to determine the reasons for this action. The Board learned that there had been a number of complaints against Dr. Carpousis, the nature and the source of which your Board does not think proper to disclose at this meeting.

Your Board has come to the conclusion that it cannot conscientiously recommend Dr. Carpousis's confirmation. It sincerely believes that his confirmation would not be in the best interests of the Society.*

Appointment of Dr. W. Ross Morris to Corporate Membership of Hospital Service Agency: Your Board is pleased to recommend the appointment of Dr. W. Ross Morris as a successor to Dr. Oscar B. Hunter to the Corporate Membership of the Hospital Service Agency.

Resolution re Physician Participation in Public Affairs: A recent announcement given prominent space in local newspapers was to the effect that a former President of the American Medical Association had been appointed head of a doctors' committee to help elect a candidate for President. This announcement stirred up considerable discussion and criticism of the AMA locally. The fact is that the AMA is not engaged in partisan politics and has not endorsed any candidate. Nevertheless, it is understandable that such an impression was gained from the news stories.

At the last meeting of the Board, held on April 28, this matter was a subject of discussion. Dr. Herbert P. Ramsey, one of the Society's Delegates to the AMA suggested the introduction of the following resolution at the next meeting of the House of Delegates in Chicago:

> WHEREAS it is the duty of every physician to discharge all the responsibilities of citizenship including those of a political nature; and
>
> WHEREAS it is not the function of his professional medical organization to participate in partisan politics;
>
> BE IT RESOLVED by this House of Delegates that the American Medical Association does not support any political party or any candidate for public office.

Your Board recommends approval of the introduction of the above resolution.†

Reorganization Plan for the District of Columbia: That portion of your Board's report at the March 5 business meeting of the Society relating to this subject was tabled, objection being made that there was not enough time to discuss it adequately.

Your Board cannot, of course, present this matter again until it is removed from the table. However, it can point out to you that the Reorganization Plan is up for approval by the Congress and a hearing is to be held in regard to the Plan on May 15. It is your Board's hope that this very important matter will come up for consideration at this meeting so that the Society can make its position known to the Congressional commttee which is holding a hearing.‡

Conclusion: This report and the one you received in the mail brings you up-to-date on the Board's activities. As usual the Board will continue to hold monthly meetings throughout the summer as there are always routine matters which require the Board's attention. The next business meeting of the Society will undoubtedly be held sometime in the fall.

Finally, your Board wishes to remind you that the 23rd ANNUAL SCIENTIFIC ASSEMBLY will be held at the Hotel Statler on September 29, 30 and October 1, 1952.

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* The motion was made and carried that this matter be recommitted to the Executive Board for further consideration after a hearing is given Dr. Carpousis.

† This resolution was amended to read "elective office" instead of "public office" and was adopted as amended.

‡ The motion was made and carried that the Executive Board's report on the Reorganization Plan for the District of Columbia be taken off the table. It was adopted as amended. The amendment: The original recommendation no. 6 was stricken and the Committee on Public Policy's recommendation approved provided that a certified pathologist be employed full time by the Coroner's office.

ANNUAL DINNER OF THE MEDICAL BOWLERS

The D. C. Medical Bowling League's fourteenth season came to an exciting climax when the Suburban Team, captained by Dr. G. Roland Gable, won first place by total pinfall over Mt. Alto, which came up with a rush and tied for first in games won and lost. Any one of five teams might have won first place on the last night of the season. Sibley No. 2, in sixth place, was only two games out of first place.

The Annual Dinner was held on May 1 at the Brook Farm Restaurant in Chevy Chase, Md. Mark Evans, well known CBS radio and TV commentator, was the guest speaker. Presiding was Dr. Roy G. Klepser, President of the League. Prizes were distributed by Dr. W. Ross Morris, Vice President of the D. C. Medical Society. Mr. Theodore Wiprud was among the guests present.

Final standings of the first five teams were as follows:

		Won	*Lost*	*Pinfall*
First	Suburban	46	32	40,086
Second	Mt. Alto	46	32	39,651
Third	George Washington	45	33	40,500
Fourth	Garfield No. 2	45	33	40,222
Fifth	Prince Georges	45	33	40,124

Members of the winning teams were:

KALORAMA BOWLING ALLEYS
20 CHIEF
1-28
JEFF KEATE

"I don't care if the roof IS about to collapse—
I've got a chance to beat High Game!"

Suburban: Dr. Gable, *Captain;* Drs. Andrew J. Betz, Cyrus R. Creveling, S. Paul Porton and Millard F. Ottman.

Mt. Alto: Dr. Alfred Dibbs, *Captain;* Drs. Henry H. Canton, Andrew Tessitore, Richard H. Fischer, Messrs. Kenneth Clark and Paul Duffy.

George Washington: Dr. John W. Price, *Captain;* Drs. Bernard A. Fitzgerald, Maurice VanKinsbergen, Blaine H. Eig, William R. Moses, Walter Price, and Mr. Frank J. Baiers, of Eli Lilly & Co.

Garfield No. 2: Dr. Frank S. Bacon, *Captain;* Drs. Ambrose Cook, John P. D'Angelo, Israel Kessler, Thomas J. Pekin, and George A. Resta.

Prince Georges: Dr. Charles Hageage, *Captain;* Drs. Frederick E. Musser, William Brainin, George Hageage, Leonard Berman, John Perkins, Edward A. Kelly, and Mr. Kendall Twigg, of E. R. Squibb & Sons.

Individuals awarded prizes for high scores were:

	High League Average	
First	Mr. Duffy	114-27
Second	Mr. Baiers	112-59
Third	Dr. Betz	110-64
Fourth	Dr. Ottman	108-3
	High Individual Set	
First	Dr. Charles Hageage	400
Second	Dr. Gable	385
Third	Dr. Bacon	385
	High Individual Game	
First	Dr. J. Phelps Hand	159
Second	Dr. William G. Cushard	158
Third	Dr. Tessitore	157
	High Strikes	
First	Dr. Musser	37
Second	Dr. Resta	36
Third	Dr. George H. McLain	36
	High Spares	
First	Dr. J. W. Price	154
Second	Dr. George L. Ball	149
Third	Dr. Duane C. Richtmeyer	146
	High Average—Each Team	
Suburban	Dr. Porton	100-61
Mt. Alto	Dr. Dibbs	101-48
George Washington	Dr. Fitzgerald	105-33
Garfield No. 2	Dr. D'Angelo	104-58
Prince Georges	Dr. Brainin	102-4
Sibley No. 2	Dr. W. B. Morse	99-72
Sibley No. 1	Dr. R. J. McNulty	102-37
Columbia	Dr. Robert L. Simpson	106-13
Garfield No. 1	Mr. John E. Grubb	100-35
Good Hopers	Dr. Alfred Wilson	105-24
Georgetown	Dr. Gordon R. MacDonald	104-25
Providence No. 2	Dr. Bruno Floria	99
Doctors	Dr. Allen S. Lloyd	100-15
Providence No. 1	Dr. Vincent J. DiFrancesco	99-56

Dr. Marcus H. Burton, former President of the D. C. Dental Society, won the annual sweepstakes

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Concerning Those Who Work with Us

NURSING

EDUCATION OF THE NURSE

Evelyn Johnson Fisher, R.N., M.S. (in Nursing Education)

Assistant Professor in Public Health Nursing, The Catholic University of America; President, D. C. League of Nursing Education

In the early days of nursing, before the existence of an organized educational curriculum, instruction for student nurses was very meager and all too often administered according to the convenience of those responsible for the provision of nursing service for the sick. The instruction given could hardly have been called education; it was training, a drilling in the formation of habits and skills by a process of repetition, so that when a given situation presented itself a certain definite response automatically resulted. The individual may or may not have understood why she acted as she did. Education as contrasted with training is concerned with the growth of the whole individual. Granted it includes training and discipline, education emphasizes the control of habit by intelligence and the variation of responses to meet the demands of each situation with which the individual is confronted. Educational leaders have stated that nursing is a fundamental department of knowledge and is worthy of being included in any comprehensive educational scheme. It is not merely a craft or a pure skill which can be taught in a trade school.[1]

In each following generation, in response to the necessary fulfillment of its obligations, nursing has attempted to develop according to existing social and health conditions. Now, in the twentieth century, better nursing service is the goal of all nursing education. The preparation of nurses who can give such service is the objective of educational programs in nursing. Contemporary nursing education is constantly being evaluated and strengthened in the light of the needs of society, present and future. Nursing education is not merely some letters after a nurse's name, nor a diploma for display; it is education for service to people.

It is agreed that nurses, professional and ancillary, are needed in far greater numbers than ever before in the history of our Nation. This implies that nursing education must prepare nurses to provide whatever nursing service is required, wherever it is needed. What this nursing is and of what the education should consist are causing considerable concern in professional circles. There is agreement that the preparation of different types of nursing personnel should vary according to the responsibilities of such personnel: "Medicine has made tremendous advances in the last three decades. These advances have complicated the question of care of the sick to such a degree that specificity of training and work is required more than ever before. This means that certain specific duties must be allotted to each of the groups of the team. It is all too much to expect any one group to be proficient in all."[2]

In 1944 a definition of nursing was prepared by Sister M. Olivia Gowan,[3] Dean of the School of Nursing Education, The Catholic University of America: "Nursing in its broadest sense may be defined as an art and a science which involves the whole patient—body, mind, and spirit; promotes his spiritual, mental and physical health by teaching and by example; stresses health education and health preservation as well as ministration to the sick; involves the care of the patient's total environment, social and spiritual as well as physical; and gives health service to the family and the community as well as to the individual."

What has brought about the acceptance of such a broad definition of nursing? How can the profession fulfill its obligations to the nurse students and to society?

In the first place, there has been a trend toward an enlightened public in health matters. Large segments of the population have learned the value of good medical and nursing care and are demanding that more of it be provided. Health education and health awareness brought about by publicity, health and social legislation, expanding public health services, and health insurance are shifting the emphasis from sickness to health, and from therapy to prevention. Tremendous implications for nursing arise from these facts.

Secondly, the necessary preparation for professional growth that immediately becomes apparent is an education that will enable the nurse to answer the demands of an informed public and fulfill the needs brought forth as the result of the changing functions of the professional nurse in an ever-changing, dynamic society. No longer can the attention of the nurse student be focused solely upon the mastery of technics associated with the sick patient recumbent in the hospital bed. Today the preparation of the nurse for her ever-widening spheres of activity requires much more than that offered by the traditional type of hospital "training." Knowledge of anatomy, physiology, bacteriology, and nursing arts is not enough. Both the general and professional studies must be placed in the same curriculum. Today's professional nurse has need for human skills learned from other disciplines, such as psychology, anthropology, sociology, and others. "Present health programs, as well as anticipated expansion in health services, make it imperative to increase the amount of nursing service of high quality. In view of the increased services required of professional nurses, their educational programs must be broadened to prepare them for the complex service required of them in large medical centers, in rural hospitals, and in public health and other community programs."[4]

The education of nurses to provide this type of nursing service requires not merely a list of courses but a curriculum planned to bring about desired effects through mental, social, and emotional growth. The applicant to a school of nursing today is young and immature. She is well prepared academically but is untested, unchallenged, and unaware of the obligations and responsibilities which nursing entails. She herself must learn to live before she can provide nursing service for the sick or the healthy members of society. She must be able to take and maintain direction, be self-critical, be able to detect abnormalities, be able to see relationships, and have the capacity to use reason and to adapt learned knowledge to new situations.

This involves two distinct areas of preparation. The first is the laying of a foundation that permits growth of many kinds: positive health, insight into one's own behavior, the behavior of others, cultural patterns, skill in the arts of communication, understanding of contemporary social institutions, and many more. The second area is specifically technical training for professional practice: thorough basic nursing preparation, development of technical skills, understanding of the effects of environment, and ability to do research, to analyze, and to teach. As a result of good nursing education the graduate registered nurse should be able to provide leadership "in making her unique contribution to the preventive and remedial aspects of illness, in improving those nursing skills already in existence and developing new nursing skills, in teaching and supervising other nurses and auxiliary workers, and in coöperating with other professions in planning for positive health on community, state, national, and international levels."[5]

With this philosophy and these objectives in mind, what are the current trends in the provision of educational programs for nurse students? As a result of a study to evaluate educational programs for nursing, it was found that professional goals have been raised and that there has been progress in the practice of educating nurses but that the progress has not been even nor is it Nation-wide:

"1. About 25 per cent of all schools met or approached standards set by the profession in 1937. In many respects, half of the schools were nearer to the standards of 1927, while another quarter were still struggling to prepare nurses by these earlier standards.

2. In general, good educational practices flourished together. Those schools which ranked high in clinical facilities usually stood well in curriculum, library facilities, faculty, and state board performance.

3. Schools of nursing are increasingly associated with large general hospitals (200 or more daily average patients).

4. Hospital schools were increasing the use of facilities of universities, colleges, and junior colleges for teaching some or all of the physical and biological sciences. No arrangement was made for the granting of degrees.

5. The number of collegiate schools of nursing has doubled in the past 20 years.

"There is a wide range of practices among schools of nursing, and specific nursing education patterns vary in different parts of the country. Many general problems exist in common throughout the Nation.

"An important measure of the success of the school in its preparation of students is the proportion of its graduates who pass state board examinations."[6]

The curriculum as planned for the nurse student is a program of integrated learning experiences to develop the entire person. As a result of such a curriculum, not only the actual experiences in the clinical areas and the classroom are carefully planned and supervised, but co-curricular activities as well are planned with objectives in mind. An integrated curriculum provides for continuity of content; more content can be taught in less time with less duplication. Such a curriculum stimulates interest by providing for early introduction to professional problems. Subject matter and experience are related in terms of desired outcomes, while learning situations are more natural.

The methods of teaching employed are as varied as the plans for the curriculum.[7] No longer does the student serve in an apprenticeship capacity alone. All the traditional methods of formal and informal teaching are employed. Clinical assignments are purposefully correlated with theoretical instruction. Planned clinical conferences in which the student actively participates with members of allied professions develop insight into the values of coöperative activities and aid in the development of communication skills. Qualified nurse faculty members have additional contact with students through the preparation of nursing care plans and family care studies in which the student begins to learn the value of careful planning in current as well as long-range nursing care for patients and their families. Under supervision the nurse student may participate in interviewing and in individual and group teaching of patients and families. The nurse student is always conscious of the fact that to provide for total patient care a multi-disciplinary approach is needed, that the hospital is but one of the many community facilities available for health care, and that the sick person in the hospital is a member of a family and of a community and expects to return to them. "Learning to make beds is somewhat less important than learning how to restore to health those who lie on these beds. Nurses need a truly liberal education which will liberate them from knowing only nursing. The meaning and purpose of nursing and of all other professions can be known only when seen from the perspective of the whole of life."[8]

At the present time there are 6 schools of nursing in the District of Columbia. Two collegiate schools of nursing offer a bachelor's degree in nursing. Two private hospital schools offer a diploma in nursing. Two official agency hospital schools offer a diploma in nursing. Four of these schools are accredited by the National Nursing Accrediting Service. At the present time there are 575 students enrolled in these 6 schools.*

Three hospitals provide nursing experience for nurse students on an affiliation basis and accept students from other schools outside of the District of Columbia. These affiliation experiences include communicable diseases, tuberculosis, psychiatry, and the nursing of infants and children.

The local public and private health agencies provide planned field experience for nurse students. The length of experience varies from a day of observation to a block of 2 months of planned experience.

The Nurses' Examining Board of the District of Columbia reports that the figures released by the Department of Measurement and Guidance of the National League of Nursing Education show that the average performance of the candidates from the District of Columbia Schools of Nursing during the period of July 1, 1950 through December 31, 1950 ranked fourth highest for the United States and territories.

The nursing profession has made strides, and nurses have increased in numbers; yet neither the profession nor the numbers seem to meet the demands. Continued vigilance on the part of the allied professions and nursing leaders is needed not only to uphold that which has been gained but to encourage continued studies for advancement and improvement in the light of changing concepts of nursing service. The allied professions must work together more closely in the attempt to better utilize the clinical material available for teaching and to evaluate the educational process, and to determine how the product of the school can best be utilized to serve our people better. "From the standpoint of a hospital administrator, nursing of the future, in broadening its base, will be and should be more and more concerned about the nursing service outside the hospital so that we won't need to build so many new hospitals,

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* Information released, February 7, 1952 by the Nurses' Examining Board of the District of Columbia.

COURSES FOR VOLUNTEER NAVAL RESERVE MEDICAL OFFICERS

Volunteer Naval Reserve Medical Department officers will be afforded the opportunity to attend, on active duty orders, the following training courses during the fiscal year 1953, which begins July 1, 1952.

Attention of all Volunteer Naval Reserve Medical, Dental, Medical Service, Nurse, and Hospital Corps officers is invited to the fact that acceptance of orders to attend these courses of instruction will not in any way increase the possibility of their being involuntarily recalled to active service.

Medical Aspects of Special Weapons and Radioactive Isotopes

A course of one-week duration, convening on August 4, 1952; November 17, 1952; and March 16, 1953 at the Naval Medical School, National Naval Medical Center, Bethesda, Md. Volunteer Naval Reserve Medical Department officers who reside in the 1st, 3rd, 4th, 5th, 6th, 8th, and 9th Naval Districts and the Potomac River Naval Command may apply to the Commandant of their respective district for orders to attend these courses. The course will present problems likely to be confronted and technics to be employed by medical department officers in the field of radiologic activity which are not available to them in their civilian capacity.

Amphibious Medicine

A course of instruction convening on July 7, 1952; October 6, 1952; and April 6, 1953 at the Naval Amphibious Base, Little Creek, Virginia. All Volunteer Naval Reserve Medical Department officers, except Nurse Corps officers, are eligible for the instructions. Those residing in the 1st, 3rd, 4th, 5th, 6th, 8th, and 9th Naval Districts and the Potomac River Naval Command may request orders to attend these courses from the Commandant of their respective district. The course will consist of lectures, training films, demonstrations and practical exercises to familiarize Medical Department officers with the nature of the medical service provided in amphibious operations. The embarkation, underway and debarkation phases of the medical service are dealt with and medical supply problems are presented.

CALENDAR OF SPEAKERS

The following members of the Medical Society of the District of Columbia have addressed lay groups during the past several weeks. The Society maintains a Speakers Bureau, sponsored by the Committee on Public Relations, through which requests for speakers for lay groups can be filled.

Date	*Speaker*	*Subject or Title*	*Organization*
March 15	Dr. Addison M. Duval	Mental Health for Teacher and Pupil	D. C. Educational Association
April 15	Drs. Truman Abbe and Murray M. Copeland	Beginnings of Radium (Abbe); A Forward Look at the Cancer Problem (Copeland)	Cured Cancer Club of Washington
April 21	Dr. Joseph L. Sheridan	Parent-Child Relationships	Stanton Parent-Teachers Association
April 22	Dr. Frank W. Konzelmann	Ancient Myths and Fetal Malformations	D. C. Society of Medical Technologists
April 24	Dr. Leroy L. Sawyer	The Hearing Clinic of Episcopal Eye, Ear and Throat Hospital	Quota Club of Washington
May 7	Dr. Julius Schreiber	The Hate Chain (re juvenile delinquency)	Northern Virginia Mental Hygiene Society
May 15	Dr. Herbert P. Ramsey	The Medical Profession and Socialized Medicine	Cosmopolitan Club

News and Personals

The University of Michigan Fifth Annual Conference on Aging will be held in Ann Arbor, Michigan, July 24–26, 1952. The conference will serve as a forum for interchanging information and for getting action on the difficult problem of financing housing for the aging. It is co-sponsored by the University of Michigan, the Michigan State Medical Society, the Committee on Aging and Geriatrics of the Federal Security Agency, and the Housing and Home Finance Agency, Washington, D. C. Those interested in attending the Conference should write to Dr. Wilma Donahue, Institute for Human Adjustment, Room 1510, Rackham Building, Ann Arbor, Michigan.

The National Gastroenterological Association again announces its **Annual Cash Prize Award Contest** for 1952. One hundred dollars and a Certificate of Merit will be given for the best unpublished contribution on gastroenterology or allied subjects. Certificates will also be awarded those physicians whose contributions are deemed worthy. The awards will be made at the Annual Convention Banquet of the NGA in October, 1952.

Contestants residing in the United States must be members of the AMA, while those residing in foreign countries must be members of a similar organization in their own country. The Association reserves the exclusive right of publishing the winning contributions in its official publication, *The Review of Gastroenterology*.

All manuscripts entered in competition for the 1952 prize should be limited to 5,000 words, typewritten in English, submitted in five copies, and must be received not later than September 1, 1952. They should be addressed to the National Gastroenterological Association, 1819 Broadway, New York 23, N. Y.

Activities of two AMA groups, **the American Medical Education Foundation and the Student AMA,** have expanded at such an accelerated rate that one secretary can no longer serve both groups. Consequently, Mr. Russell F. Staudacher will devote his full time to being Executive Secretary of the Student AMA and Executive Editor of its journal.

Mr. Hiram W. Jones, of Elmhurst, Illinois, who has been with the Research Council for Economic Security, Chicago, was appointed Executive Secretary of the Foundation. He formerly was Director of Finance for the Chicago region of the National Conference of Christians and Jews.

Today the Student AMA has approximately 10,000 members in 44 active chapters, with 12 more provisional chapters to be added in December.

During the first three months of 1952, the Foundation received more individual contributions than during the entire year of 1951. These contributions were received before the actual drive for funds, April 1 to June 30, got under way. The goal during that period is $2,000,000.

The Senate District Subcommittee on Public Health, Education and Recreation approved a bill, previously passed by the House Public Works Committee, to allow five more years for completing the proposed **Washington Hospital Center**, which is not yet in construction. The basic law authorizing the Center stated that it should be finished by June 30, 1952.

Plans are going forward now to build the Hospital Center on the grounds of the United States Soldiers Home. Episcopal Eye, Ear and Throat, Emergency and Garfield Hospitals will comprise the Center.

The semi-annual meeting of the **Middle Atlantic States Regional Conference** was held in Philadelphia, May 8, at the Philadelphia County Medical Building. The theme for the meeting was "Influences Affecting the Medical Profession—Internal and External."

Dr. William P. Herbst was the official representative of the Medical Society of the District of Co-

Calendar of Meetings, April 16—May 15

April 16	Business Meeting of Society
	Executive Board
April 17	Graduate Nurses' Association
April 21	Board of Censors
	Committee on Health and Accident Insurance
April 22	Grievance Committee
April 23	Board of Censors
	Committee to Study Nursing Needs
April 25	Committee on Radio, TV, and Motion Pictures, Annual Scientific Assembly
	Medical Care Services for Civil Defense
April 28	Executive Board
April 29	Advisory Committee on Medical Care, D. C. Health Department
April 30	Medical Service of D.C.
	Health Section, United Community Services
May 1	Section on Neurology and Psychiatry
	Executive Committee, Gallinger Hospital
	Health Section, United Community Services
May 2	Subcommittee (Medical Care) on Fee Schedule for Iron Workers' Trust Fund
May 6	Grievance Committee
May 7	Annual Business Meeting of Society
	Executive Board, Woman's Auxiliary
	Medical Technical Committee, D. C. Health Department
May 9	Committee on Medical Care
May 10	Section on Pathology
May 12	Committee on Blood Banks
May 13	Committee on Public Policy
May 14	Woman's Auxiliary
	Medical Officers' Reserve Units
May 15	Section on Radiology

lumbia. Several Washington physicians took part in the program. Admiral Joel T. Boone, USN (Ret.), Chief Medical Director of Veterans Administration, spoke on "Problems Involved by the Continued Extension of Medical Care by the Veterans Administration." Dr. Arden Freer, Deputy Chief Medical Officer of VA, participated in a Question and Answer Period on "External Influences Affecting the Medical Profession." In a luncheon address Dr. Joseph S. Lawrence presented "The Washington Horoscope."

At the meeting of the **Executive Board of the Medical Society of the District of Columbia,** April 28, **Dr. W. Ross Morris** was appointed a corporate member of Hospital Service Agency, representing the Society, succeeding the late Dr. Oscar B. Hunter.

At this meeting **Mr. Lawrence A. Zupan,** who has served as Executive Assistant to the Secretary of the Society since August, 1949, received recognition for his faithful services by being named Assistant Secretary.

The H. C. Hachmeister Lecture in Pharmacology for 1952 was delivered by Dr. George B. Koelle on May 8 at Georgetown University School of Medicine. The subject of the lecture was "Pharmacological and Therapeutic Significance of Anticholinesterase Drugs." Dr. Koelle was selected for the Lectureship because of his pioneer studies on anticholinesterase drugs and because of his fundamental contribution toward developing a histochemical method for localizing cholinesterase activity.

The Medical Society of Saint Elizabeths Hospital held its fifteenth Annual Meeting, April 18 and 19, in Hitchcock Hall. The two days offered members a full program of scientific papers and special events.

The opening paper, April 18, was on "Research in Cortisone Therapy" by Drs. Ai Ding Fang and Solomon Katzenelbogen. The afternoon was devoted to a Symposium on Adolescence with several invited speakers. The following papers were presented:

"The Psychology of the Adolescent Girl," Dr. Reginald S. Lourie, Director, Department of Psychiatry, Children's Hospital

"The Psychology of the Adolescent Boy," Dr. Thomas A. Harris, of the Fairfax Psychiatric Clinic

"Psychotherapeutic Technics," Dr. Sidney Berman

"The Psychodynamics of Juvenile Delinquency," Dr. Donald A. Bloch, USPHS, on the staff of the National Training School for Boys

"Institutional Treatment of the Adolescent," Lloyd W. McCorkle, Director of the Highfields Project, Hopewell, N. J., an institution which is experimenting on a new approach to juvenile delinquency.

Following the afternoon session members and guests were taken on a tour of the new geriatric building. Dr. Winfred Overholser, Superintendent of the Hospital, was host at a buffet supper in his apartment.

Among the papers presented on Saturday were several by members of the District Medical Society:

"Observations of the Families of Patients Requiring Hospitalization," Dr. Zigmond M. Lebensohn

"Attitude of the Family of the Hospitalized Patient," Dr. Manson B. Pettit

"Neurosis and Psychosis as Defense Reaction against Paraphilia (Perversion)," Dr. Benjamin Karpman

"Suicide, Impulse, and Remorse," Dr. Henry P. Laughlin

"A Suggestion for Psychotherapy," Dr. Lester L. Burtnick

"Neurologic Disease Simulating Psychiatric Syndromes," Dr. Harold Stevens.

The final address was made by Dr Overholser. He spoke on "Saint Elizabeths Hospital: A Century of Tradition," which will appear as an article in a future issue of the MEDICAL ANNALS.

A dinner-dance at the Willard Hotel was the concluding social event.

The House Staff of Garfield Memorial Hospital held an all-day scientific meeting in the Kellogg Building, April 29. The program began at 9 a.m with a Surgical Clinic by Drs. Harry H. Kerr and Joseph B. Bogan and their staffs. Papers were presented by Drs. Thomas Bradley, Ralph M. Caulk, Clarence K. Fraser, Ernest A. Gould, Russel J. Jansen, William D. Jarman, William C. Meloy, William J. Tobin, and Theodore Winship.

A Clinicopathologic Conference was presented by Drs. Winship, William L. Howell, and Lewis C. Ecker, of the Departments of Medicine and Pathology. Moving pictures were shown by Drs. William W. Chase and Edgar W. Davis.

Arrangements for the meeting were made by Drs. Jansen, William E. Bageant, and E. Clarence Rice. The closing event was the banquet at the Kennedy-Warren.

The Public Health Committee of the Washington Board of Trade held a luncheon meeting at the Burlington Hotel, May 16, to discuss problems confronting the voluntary hospitals. Dr. Frank D. Costenbader, President of the D. C. Medical Society, Dr. Crenshaw D. Briggs, Chairman of the Committee on Care of Indigents, also of the Medical Society, and Mr. Walter N. Tobriner, President of the Hospital Council for the Greater Washington Area, were among those invited to speak because of their thorough knowledge of the hospital situation in Washington and vicinity.

Free hearing tests and a hearing show were sponsored during National Hearing Week by the **Washington Hearing Society.** The tests and programs were given in the American Legion Auditorium, 1608 K Street, N.W., on May 6, 7 and 8 from 10 a.m. to 4 p.m. Among the otolaryngologists who led round table discussions and demonstrations of ear, nose, and throat examinations were Dr. Aram Glorig, Director of the Army Audiology and Speech Correction Center, Dr. Victor R. Alfaro and Dr. T. Frasier Williams. Participating in the activities, in addition to the Washington Hearing Society, were the Army Medical Center, the D. C. public schools, the District Health Department, the D. C. Rehabilitation Service, and the Volta Bureau.

The D. C. Dental Society has approved a budget payment plan which its members may offer their patients for dental services which might otherwise be deferred because of their cost. Briefly, the plan is as follows:

The National Bank of Washington has agreed to accept, without recourse to the individual dentist, notes offered for dental services. The bank will charge the patient $6 per $100 per year. The doctor will receive, at the inception of the plan, 95 per cent of the amount of the bill. The remaining 5 per cent will go into a common reserve loss fund, held at the bank in the name of the Society. All uncollectible accounts will be charged against the reserve fund. As the money accumulated in the reserve fund is built up to a level agreed upon the rate of withholding from the amount of the bill will be gradually reduced from 5 per cent to 4 per cent to 3 per cent, and so on.

Although some dental societies charge an enrollment fee, the plan offered by the Economics Committee and accepted by the Dental Society requires only that the enrollee be a member in good standing of the Society, and that he adhere to the rules of participation and agreements signed with the bank.

The Howard F. Kane-A. F. A. King Obstetrical Society of George Washington University School of Medicine honored 10 Washington physicians with Honorary membership in the Society, May 10. The physicians were: Dr. Andrew A. Marchetti, Professor of Obstetrics and Gynecology, Georgetown University School of Medicine; Dr. John Parks, Professor of Obstetrics and Gynecology, George Washington University School of Medicine; also from the Department of Obstetrics and Gynecology of George Washington University: Drs. Radford Brown, Jacob Kotz, Henry L. Darner, Herbert P. Ramsey, Clinical Professors; Dr. Robert H. Barter, Associate Professor; Dr. George Nordlinger, Associate Clinical Professor; Drs. L. Lee Cockerille and Samuel M. Dodek, Assistant Clinical Professors.

Fifteen senior students of the School of Medicine were made active Fellows of the Society. These students received the highest grades in obstetrics and gynecology at the end of their junior year.

The ceremonies were held at the home of Dr. Dodek, faculty advisor to the Society. A reception followed the induction of new members into the Society.

The Third Annual Health, Welfare and Recreation Conference of the United Community Services was held, May 23, at the Shoreham Hotel. Three members of the District Medical Society participated in the program of panel discussions which the conference featured. They took part in the following panels:

Rehabilitation of the physically handicapped: Dr. Charles S. Wise, Professor of Physical Medicine, George Washington University School of Medicine

What has the Federal Government done for Washington: Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital

Rehabilitation of the economically dependent: Dr. Josephine J. Buchanan, Chief, Department of Physical Medicine and Rehabilitation, Gallinger Municipal Hospital.

The District of Columbia Tuberculosis Association celebrated its 50th anniversary at its annual meeting and dinner, May 12, at the Burlington Hotel. More than 200 persons attended. Dr. Charles E. Bish, President of the Association, introduced the principal speaker, Dr. David T. Smith, Professor of Bacteriology at the Duke University School of Medicine, and former President of the National Tuberculosis Association. Dr. Smith spoke on "What's Ahead in Tuberculosis Control," discussing the value of the new drugs and their effects on tuberculous patients.

Dr. Howard Payne, Medical Director of Freedmen's Hospital Annex, spoke on "The Tuberculosis Situation Today."

Mr. William E. Leahy, of the Association's Board of Directors, called the roll of the 1902 founders, many of whom were members of families still prominent in Washington. Dr. James A. Gannon gave a talk on how the Association was founded and some of its early experiences.

Dr. Addison M. Duval was one of 7 new members elected to serve on the Board of Directors of the Association. Reëlected to office were the President, Dr. Bish; Clarence W. Davis, Vice President; Bernard L. Amiss, Treasurer; and Dr. Thelma Hunt, Secretary.

Among the guests at the meeting were Dr. Daniel L. Seckinger, District Director of Health, Dr. Arthur C. Christie, Dr. Robert J. Anderson, and Theodore Wiprud, Secretary of the Medical Society.

The Social Hygiene Society held its Annual Luncheon Meeting and observance of National Social Hygiene Day at the Y.W.C.A., May 2. Presiding was the President, Dr. William P. Herbst, who spoke on the medical and public health aspects of the Society's activities. Mr. Ray H. Everett, the Executive Secretary, in his inimitable style related some of the human interest angles to the work of the organization. Dr. Winfred Overholser gave an excellent talk on "What's Right with Washington."

The Jacobi Society of Washington convened for its annual banquet, April 21, at the Hotel Statler. Dr. Arthur Dick, President of the Society, presided at the dinner meeting. The principal speaker was Dr. Paul R. Hawley, Executive Secretary of the American College of Surgeons. The subject of his address was "Gains and Losses in the Past Fifty Years."

The George M. Kober Medical Society held its annual banquet for members and guests on May 19 at the Army-Navy Club. The speaker was Mr. Paul M. Mayer.

At the Society's dinner meeting, April 21, Dr. Robert Sterling McGrath read a paper on "Allergy—Recent Trends and Integration of Allergy in Clinical Practice."

The Clinico-Pathological Society met on May 20 at the home of Dr. Walter Boyd. The scientific program consisted of two case reports: "Herpes Gestationis" by Dr. Wendell M. Willett and "Mediastinal Emphysema—Hamman's Syndrome" by Dr. Theodore J. Abernethy.

The newly elected officers of the **Washington Medical and Surgical Society** are as follows:

Dr. George W. Reeves, *President;* Dr. John M. Orem, *Vice President;* Dr. Emil J. C. Hildenbrand, *Secretary.*

Dr. Frank E. Gibson, Sr., is permanent Treasurer.

The Alexandria (Va.) Medical Society elected officers, April 10. The new officers are:

Dr. Milton R. Stein, *President;* Dr. F. Preston Titus, *Vice President;* Dr. John E. Roberts, *Secretary-Treasurer.*

The Louis Mackall Medical Society held its annual social gathering and dinner, May 14, at the Kenwood Country Club. Twenty-seven members enjoyed an afternoon of golf, and 132 were present for the dinner. Among those who attended the dinner were the oldest charter member of the Society, Dr. A. Y. P. Garnett, who gave a brief talk, and Mr. Louis Mackall, Jr., son of the doctor for whom the Society is named.

Dr. Howard T. Karsner, international authority in the science of pathology, presently Medical Research Advisor to the Surgeon General of the Navy, has received one of the highest honors an American pathologist can receive, the custodianship of the "gold-headed cane" of the American Association of Pathologists and Bacteriologists. This was bestowed upon him at the annual meeting of the Association in New York City, April 10.

The cane, a Malacca stick with a gold head, is inscribed with the names of the possessors and remains in the possession of the recipient during his lifetime. The last possessor was Dr. Ludvig Hektoen, former Professor of Pathology at the University of Chicago and Director of the McCormick Institute of Medical Research, who died in June, 1951.

Prior to accepting his present position in 1949, Dr. Karsner, for 35 years, was Professor of Pathology and Director of the Institute for Pathology at the Western Reserve University in Cleveland, Ohio. He was selected custodian of the cane for his early work, much of which was carried out while teaching at Western Reserve University.

Dr. Karsner is known for his work on Hodgkin's disease, cancer of the liver, experimental studies of infarction, diseases of the kidney, and studies of anaphylaxis and anaphylactoid phenomena. He has published over 250 papers, including lectures, monographs, and textbooks, and is also known for his extensive studies of the diseases of the cardiovascular system and tumors of the ductless glands.

Dr. Karsner is President of the National Board of Medical Examiners. He is an Associate member of the District Medical Society.

Dr. Leonard A. Scheele, retiring President of the World Health Assembly, addressed the opening meeting of the Fifth Assembly, May 5, in Geneva. Dr. Juan Salcedo, Secretary for Health in the Philippines, is the new President.

Dr. Scheele took the oath of office for a second 4-year term as Surgeon General of the U. S. Public Health Service, April 3. Nomination for his reappointment by President Truman was confirmed by the Senate in March.

Rear Admiral Lamont Pugh, MC, USN, Surgeon General of the Navy, was recently elected to active Fellowship in the American Surgical Association at its annual meeting in White Sulphur Springs, West Virginia.

The objectives of the Association are the cultivation and improvement of the science and art of surgery, the elevation of the medical profession, and such other matters as may come legitimately within its sphere.

Active membership in the Association does not exceed 250 Fellows, and Honorary membership, 25.

On April 29, Admiral Pugh addressed the staff and senior students of Jefferson Medical Center in Philadelphia on "Oral Medicine."

Rear Admiral Warwick Thomas Brown, MC, USN (Ret.) is the new Administrator of **Emergency Hospital.** He succeeds James G. Capossela, who resigned last November.

Admiral Brown, who will come to Washington from Virginia Beach, Va., recently served as the

Fifth Naval District medical officer in Norfolk, Va. During World War II he was division surgeon of the First Marine Division and directed medical operations on Guadalcanal. In 1946 he became medical director of the Naval Hospital at Quantico and in 1949 was commandant of the Naval Hospital in New York City.

For his wartime activities, Admiral Brown was awarded the Legion of Merit, the Gold Star in lieu of a second Legion of Merit, and the Bronze Star.

The Hospital Directors, at their meeting, May 2, elected George A. Garrett, former Ambassador to Ireland, as Board President. He previously served as President, from 1944 to 1947, and replaces Samuel H. Kauffmann, who has held the post since then but did not wish to be reëlected. Mr. Kauffmann will continue to serve on the Board as Vice President with F. Moran McConihe and William J. Flather, Jr., who were reëlected to office. Also reëlected were Travis Brown, Secretary, and Thomas H. Reynolds, Treasurer.

Dr. Samuel M. Dodek, Assistant Clinical Professor of Obstetrics and Gynecology, George Washington University School of Medicine, was invited to present his exhibit on "Tocographic Studies upon the Parturient Human Uterus by an Original Method" before the Eighth Congress of International Surgeons in Madrid, Spain, May 19–23. The same exhibit received an award for scientific excellence from the International and Fourth American Congress on Obstetrics and Gynecology at its meeting in New York City in 1950. The display shows a method of making recordings, or tracings of uterine contractions to study the effect of analgesic drugs and anesthetic agents on uterine contractions during labor.

Dr. I. Phillips Frohman represented the American Academy of General Practice at a Conference on Care of Premature Infants, which was held at the Wardman Park Hotel, April 21. The Conference was sponsored by the American Hospital Association. Representatives were also present from the American Board of Gynecology and Obstetrics, American Dietitians' Association, the New York City Health Department, the American Public Health Association, and the Federal Security Administration.

Dr. Howard T. Karsner delivered a lecture to staff members of Crile Veterans Administration Hospital on May 15, in Cleveland, Ohio. He spoke on "Diseases of the Blood Vessels of the Lungs."

While in Cleveland, Dr. Karsner was the principal speaker at the 50th anniversary celebration of the Cleveland Academy of Medicine, May 18. In his address on "The Past Is Prelude," he reviewed the advancements in medicine over the past fifty years. Some 40 civic organizations took part in the convocation ceremonies.

Lt. Colonel Lorenz E. Zimmerman, MC, USA, was awarded the Legion of Merit for exceptionally meritorious service in Korea during a ceremony held at the Armed Forces Institute of Pathology. Colonel Zimmerman was presented with the award for his outstanding achievements in pathology while working under extremely difficult conditions in the Korean area. He was recently presented with the Bronze Star for his supervision and coordination of laboratory work in Korea. Colonel Zimmerman is an Associate member of the District Medical Society.

Rear Admiral Bertram Groesbeck, Jr., has succeeded Rear Admiral William J. G. Agnew as Commander of the National Naval Medical Center in Bethesda, Md. Admiral Agnew retired from active duty, April 30.

Admiral Groesbeck has been serving as Assistant Chief of the Navy's Bureau of Medicine and Surgery in charge of aviation and operational medicine. A native of Brooklyn, New York, he is a graduate of George Washington University School of Medicine. He was commissioned in the Navy in 1917, when he reported to Philadelphia Naval Hospital. He was serving as medical officer on the staff of the aircraft commander of the battle fleet at the time of the Pearl Harbor attack and continued there until March, 1942. During the War years he served aboard the aircraft carrier *Enterprise*. He received a letter of commendation from Admiral Chester W. Nimitz, Pacific Fleet Commander, for his services during World War II.

Dr. Otis L. Anderson, Associate Chief of the Bureau of Medical Services of the Public Health Service since 1949, has been appointed Chief of the

Bureau, succeeding Dr. Joseph W. Mountin, deceased.

Dr. Anderson, a native of Lincoln, Nebraska, has been a member of the staff of PHS since 1930. From 1941 to 1944 he was Assistant Chief of the Service's Division of Venereal Disease. From 1944 to 1949 he headed the 23 PHS hospitals throughout the country.

Dr. R. Lomax Wells addressed the Middle Atlantic Association of Industrial Editors, April 28, on "The Role of the Company Magazine in Health Education." The meeting was held in Washington.

Dr. Calvin T. Klopp attended the meetings of the American Association for Cancer Research in New York City, April 11–13, where he reported the research findings from two papers prepared by staff members of the Cancer Clinic and the Department of Surgery of George Washington University School of Medicine. The papers reported on, with authors, were: "A Method for Evaluation of Fractionated Intra-arterial Cancer Chemotherapy in the Rat," Everhardt Trams, Prosper Loustalot, and Dr. Klopp; "Parenteral Aureomycin Therapy in Cancer," Drs. Jeanne C. Bateman, Klopp, and J. Roland Barbario.

Dr. Thomas M. Peery, Professor of Pathology, George Washington University School of Medicine, was one of the speakers at the Annual Meeting of the American Association of Pathologists and Bacteriologists in New York City, April 10. The title of his paper was "Does Brucellosis Cause Calcific Aortic Stenosis? I. The Pathologic Evidence."

Drs. G. Brecher and E. P. Cronkite, of the Naval Medical Research Institute and National Institutes of Health, were co-authors of a paper presented at the same meeting on "Correlation of Bone Marrow Injury with Mortality in Different Species of Irradiated Mammals." Dr. Cronkite is an Associate member of the Medical Society.

Captain George N. Raines, MC, USN, Head of the Neuropsychiatry Branch, Professional Division, represented the Navy at the meetings of the American Neurological Association, May 8–10, in Atlantic City, New Jersey. Dr. Robert Cohen, of the Department of Neurology and Electroencephalography, U.S. Naval Hospital, and Captain Raines presented a paper entitled, "On the Phenomenon of 'Class' in Communication Function." In addition, Dr. Raines monitored a scientific exhibit on "Electroencephalography in Combat Head Injuries."

Dr. Raines also attended the meetings of the American Psychiatric Association in Atlantic City, May 11–16, where he discussed two of the papers presented on the program, and, as Chairman of the Committee on Nomenclature and Statistics, participated in the panel presentations of the Committees on Professional Standards.

Dr. Winfred Overholser addressed the Mental Health Society of Montgomery, Alabama, March 20, on "Community Mental Health—What Is It and How Do We Achieve It?"

On April 10 Dr. Overholser addressed the Charlottesville Chapter of the Mental Hygiene Society of Virginia on "Some Psychiatric Aspects of Delinquency."

Dr. Wallace M. Yater, Director of the Yater Clinic, was one of six graduates of Eastern High School who received Alumni Achievement Awards at the annual Alumni Dinner in the school cafeteria, April 30.

Dr. Seymour Alpert, Assistant Professor of Anesthesiology, George Washington University School of Medicine, spoke on "Blood Pressure during Anesthesia" at the Carolinas-Virginias Hospital Conference in Roanoke, Va., April 25.

Theodore Wiprud, Secretary of the D. C. Medical Society, addressed the Society of X-ray Technicians at their annual banquet, May 10. Mr. Wiprud spoke on "The Professional Organization."

Dr. Worth B. Daniels, of Georgetown University School of Medicine, **and Dr. Frank G. MacMurray,** of Washington, reported on "Cat-scratch Disease" before the meeting of the American College of Physicians in Cleveland, April 22. They reported on 60 cases which had been observed by physicians in 15 states and Hawaii and Canada.

Drs. Sterling V. Mead and Karl H. Wood, Associate members of the D. C. Medical Society, were guest essayists, April 10–13, at the annual meeting of the Southeastern Society of Oral Surgeons in Hollywood, Florida.

Dr. Ruth B. Benedict, Clinical Instructor in Medicine, George Washington University School of Medicine, presented a paper before the annual meeting of the American Psychosomatic Society, March 30, at the Drake Hotel, Chicago. Dr. Benedict's paper was entitled, "Emotions, Life Situations, Bleeding, and Hemolysis in Certain Blood Dyscrasias."

Mr. Ferdinand V. Grayson succeeded Mr. Arthur H. Kruse as **Executive Director of the United Community Services,** June 15. Mr. Grayson has been associated with UCS since November 1948 as Budget Director and Assistant Executive Director. He has had 20 years' experience in the field of health, welfare and recreation planning and community organization work. Before coming to Washington he was Executive Director of the Welfare Council of Lackawanna County, Scranton, Pa.

MEMBERSHIP

The following applicants for membership were duly elected to membership at the meeting of the Executive Board, April 28, 1952, in accord with Amendment XI, Section 2, of the Constitution and By-laws of the Society.

Active Members

Alfred Baer, 2713 Wisconsin Avenue, N.W.
Claude C. Caylor, Jr., 1128 Colonial Avenue, Alexandria, Va.
Otto Englehart, Jr., 5609 Woodway Lane, N.W.
Benjamin L. Jamison, St. Elizabeths Hospital
Wilmer D. Kehne, 2033 Waterside Drive, N.W.
John Kehoe, 3332 Buchanan Street, Mt. Rainier, Md.
Edward C. McGarry, 11525 Grandview Avenue, Silver Spring, Md.
Howard S. Madigan, R.F.D. 2, Silver Spring, Md.
Wesley M. Oler, 4301 Massachusetts Avenue, N.W.
Meyer Rosenbaum, 2311 North 11th Street, Arlington, Va.
William J. Schewe, Mayflower Hotel
Forrest V. Schumacher, 10805 Jewett Street, Silver Spring, Md.
Joseph L. Sheridan, 1624 Nicholson Street, N.W.
Bruce I. Shnider, 5924 9th Street, N.W.
Garrett M. Swain, 1904 R Street, N.W.
John F. Westfall, 2146 Wyoming Avenue, N.W.

Associate Members

Clift P. Berger, 3147 21st Street, N., Arlington, Va.
Emile H. Bisharat, 3800 Reservoir Road, N. W.
Vincent H. Gillson, Armed Forces Institute of Pathology
Samuel C. Gordon, 3000 Connecticut Avenue, N.W.
Lorin E. Kerr, 907 15th Street, N.W.
Joseph Leighton, 2122 Dexter Avenue, Silver Spring, Md.
Allan McNeill McKelvie, 1801 K Street, N.W.
John W. Perkins, 5301 Hamilton Street, Hyattsville, Md.
Robert R. Smith, 11108 Ardwick Drive, Rockville, Md.

The following applicants for membership will be voted on at the meeting of the Executive Board, July 28, 1952.

For Active Membership

Christopher T. Bever, Harvard University—1943
Alexander Goulard, Jr., Jefferson Medical College—1948
Marcus P. Goumas, George Washington University—1942
Albert M. Jenkins, Jr., University of Cincinnati—1947
Gordon W. Kelley, University of Maryland—1950
Walter E. McCawley, Georgetown University—1922
F. Turner Reuter, George Washington University—1944

Recent changes in membership status:

Active to Life

Abraham D. Butz

Active to Associate

Maynard I. Cohen
Dan Feriozi
William J. Fink
Melvin T. Johnson
Richard H. Meredith
Barbara Moulton
R. Stevens Pendexter
Ruth M. White

Active to Affiliate

John J. Curry
Allen M. Ferry

Affiliate to Associate

Andrew J. Welebir

Resigned
Active

Robert L. Brickhouse
Rene Cailliet
Alvin J. Cummins
Francis DeCoste
Harry F. Dowling
Henry G. Hadley
Dean M. Hayes
Paul Heller
William E. Long
Benjamin F. Miller
Charles H. Nash
Leonard B. Rose
Oliver P. Winslow
William H. Woodson

Associate

John J. David
James H. Gillen
Theodore C. Keller
Susan P. Souther

CORRESPONDENCE

WASHINGTON, D.C., March 24, 1952

TO THE EDITOR:

The Board of Directors of the Washington Home for Foundlings wishes to bring to your attention the complete facilities available for the care, and placement in adoption, of babies of unwed mothers.

The Medical Director, Dr. William S. Anderson, has established an efficient service for the newborn. This approved service includes cribs for twenty-five babies, an isolation unit, complete nursing coverage, and when necessary, close liaison with Children's Hospital for certain diagnostic and therapeutic measures.

The emotional as well as the physical needs of the infants are met by individualized care. Psychological studies are an essential part of their care.

An able Social Service staff functions to solve the multiple problems which arise in connection with placing babies for adoption. You know, only too well, the hazards of direct placement, not only to the child but to the adopting parents.

You are cordially invited to make inquiry of Miss Evelyn Hibbard, Director of the Home, Woodley 6367. We would be glad to have you visit the Home, which is located at 4510 42nd Street, N.W.

If you have patients who are unmarried and considering adoption placement for their babies we will be glad to have you tell them of the services offered here.

Cordially yours,
W. S. PRATT, JR.
President, Board of Directors,
Washington Home for Foundlings

BOOK REVIEWS

Untoward Reactions of Cortisone and ACTH. A Monograph in American Lectures in Internal Medicine. VINCENT J. DERBES, M.D., F.A.C.P., Associate Professor of Medicine, Tulane University of Louisiana School of Medicine; Head of Department of Allergy, Ochsner Clinic; Visiting Physician, Charity Hospital of Louisiana at New Orleans; and Staff Member, Foundation Hospital, New Orleans, Louisiana, AND THOMAS E. WEISS, M.D., Instructor in Medicine, Tulane University of Louisiana School of Medicine; Member of Department of Medicine, Ochsner Clinic; Visiting Physician, Charity Hospital of Louisiana at New Orleans; and Staff Member, Foundation Hospital, New Orleans, Louisiana. Edited by ROSCOE L. PULLEN, M.D., Director, Division of Graduate Medicine, The Tulane University of Louisiana, New Orleans, Louisiana. Price, $2.25. Pp. 77. Springfield, Ill.: Thomas, 1951.

This is Publication Number 131 in the American Lecture Series of publisher Charles C. Thomas. Most of these little monographs are literary gems for the discerning reader; Number 131 is no exception.

Derbes and Weiss have planned their book with two brief introductory chapters, mainly on physiology. These are followed by chapters encompassing the various organ-systemic effects; then a final chapter on treatment of untoward reactions. Although there have been some other reports since this monograph was published, the total content is excellent and up-to-date. The bibliography is not overwhelming numerically but is quite complete. The index is serviceable.

Like Thomas' other books in the American Lecture Series, "Untoward Reactions of Cortisone and ACTH" has been attractively produced. It is pocket-size, has a good flexible binding, and large clear type. It is recommended for any physician who would like to catch up on his reading about ACTH and cortisone.

H. H. H.

The Specialties in General Practice. Edited by RUSSELL CECIL, M.D., Professor of Clinical Medicine, Emeritus, Cornell University Medical College, New York City, with articles by fourteen contributors. Price, $14.50. Pp. 818, with 470 figures. Philadelphia: Saunders, 1951.

This volume, compiled by a distinguished physician and presenting separate chapters on 14 branches of medicine, is intended primarily for the general practitioner. For convenient reference, a description of the most likely to be encountered conditions in these specialties is ably reduced to one volume. The preface by Dr. Cecil sincerely commends the active general practitioner and suggests that specialists are becoming increasingly aware of his indispensable role as family doctor to the nation.

Chapter 1, "Minor Surgery," by William A. Barnes, is best for its comments on burns and on infection. His discussion of surgery for polydactylism, however, appears superfluous, as it is probable that most general practitioners would refer such cases to the general or plastic surgeon. Also, his suggested use of a sharp scalpel to remove a section from the toenail or finger nail for evacuation of the subungual hematoma might be considered by some as obsolete, since an excellent instrument called a "nail drill" does the job more easily and less painfully and does not alarm patients, particularly children.

Dr. L. Ramsay Straub, in his chapter on orthopedic surgery, emphasizes congenital problems. He cautions readers that "early and accurate diagnosis often marks the difference between success and failure of therapy."

The photographs and drawings in Dr. Charles L. Herndon's chapter on fractures and dislocations should prove helpful to the family doctor. Its table, Fracture Treatment Guide for General Practitioners, is a short cut to the salient points of fractures from shoulder to foot. Dr. Herndon points out that the family doctor still treats the majority of fractures in this country, and he feels that this is as it should be, "provided the family doctor who treats fractures recognizes his limitations." Diagnostic skills might be improved by a thorough study of this chapter, and the general practitioner is provided with an account of the proper first aid treatment for those fractures whose treatments are beyond his ability.

In the field of urology, Dr. Hugh J. Jewett presents excellent tables on differential diagnoses of urogenital diseases. His exposition of sexual disorders in the male from an etiologic standpoint is both interesting and informative.

The importance of the rectal examination, both digital and proctoscopic, is stressed in Dr. Charles G. Child's account of the diseases of the anus, rectum and colon. The necessary equipment for a proctoscopic is neatly described, the necessity for a complete physical examination of the patient is urged, and the reader is reminded that "no compromise can be permitted; rectal bleeding must be considered due to cancer until proved otherwise."

Unfortunately, Dr. Louis M. Hellman's coverage of gynecology and obstetrics leaves much for the inquisitive medical mind to seek in larger volumes on these topics. However, Dr. R. Cannon Eley contrives to make "Pediatrics" an excellent reference chapter. After polling his colleagues on the childhood diseases most frequently encountered by them in their practices, he examines these conditions from a symptomatologic viewpoint in a practical and straightforward manner.

Dr. R. Townley Paton's "Ophthalmology" describes the proper use of the ophthalmoscope and the emergency treatment of eye disorders. Following this, Dr. Chevalier L. Jackson brilliantly summarizes the diseases of the larynx, bronchi, and esophagus, an account remarkable for its wealth of information and clarity of style—but this is, of course, true of all his teachings.

The section on otology by Dr. Edmund P. Fowler left many of this reviewer's questions unanswered, but Dr. George M. Lewis's treatment of dermatology and syphilology is an adequate refresher course on the simpler skin diseases and their treatment.

Psychiatry is covered by Drs. Douglas D. Bond and John N. Flumerfelt in a commendably concise and clear manner. Their delineation of the etiology and symptoms of personality disorders, particularly alcoholism, and their account of the psychosomatic approach offer the general practitioner a quick insight into this specialty for the purposes of diagnosis and, in some cases, treatment.

In so far as it has provided a handbook for the family doctor, this volume can be said to have successfully accomplished its mission. It is not, however, a substitute for the thorough study required to master any one of the medical specialties.

I. Phillips Frohman, M.D.

CAT.

PHILIP JAISOHN, B.S., M.D.*
(1869–1951)

Dr. Jaisohn lived a dual career, that of physician-statesman. He was born in Cholla Province, southern Korea, of the union of two princely houses, the House of Soh and the House of Kim. Through this line he was closely connected with royalty, the Royal Family of Yi, rulers of Korea since 1392. He was a nephew of Soh Kwang-bŏm, the first Korean Ambassador to the United States, who was later Prime Minister.

At a very early age he became conscious of social conditions and unhappy over the evils of absolute monarchy. Regardless of the fact that his uncle was Governor of Cholla Province, and later Prime Minister, and that great wealth was his, as well as high station, he became deeply interested in the welfare of the common people. At the age of 11 he became profoundly interested in books on American history, the American way of life, and the ideals of democracy. Here was born his deep interest in the democratic way of life and his determination to bring that way of life to his people. Educated as a nobleman should be, at the age of 12 he took the preparatory examinations in Chinese and Korean classics, one of the youngest students in history to pass them. For this he received the personal congratulations of the King. Following this he spent three years in Japan studying at the Military School and specializing in military science.

Upon his return to Korea, imbued more than ever with progressive thinking, he became the leader of a group of liberal-minded young men, considered the most brilliant young minds in Korea. Highly educated, all of them in Japan, internationally-minded and progressive, they found themselved rebuffed by the old conservative party headed by the King and Queen. Thus, in Korea, there emerged two potent elements and opposing ideologies, the corrupt, existing government, which was an absolute monarchy, and the new, progressive group, liberal and democratic.

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* Miss Muriel Jaisohn has written a most fascinating account of the life of her illustrious father and has given the Medical Annals permission to publish it.

On December 5, 1884, this group of liberals entered the palace of the King, kidnapped and imprisoned him. At the point of guns, the King was forced to sign a long series of edicts installing the new men as cabinet ministers and introducing social reforms for the benefit of all the people. However, outwitted by the cunning and powerful Queen Min, the small group of liberals found themselves surrounded by a large number of armed forces. Hopelessly outnumbered, after a fierce battle, the small group of young men, their ammunition gone, were forced to flee. Thus Philip, at the age of 15, took part in an important attempt of the progressives to take over the government, and he was obliged to flee, with a price on his head.

Befriended by liberal-minded Japanese and American friends, he sailed for America, determined to find the democratic way of life he had read so much about. Unable to speak English, and penniless, he nevertheless obtained work and eventually came to Wilkes-Barre, Pennsylvania, where he attended the Harry Hillman Academy. From there he went to Lafayette College and thence to Washington, D. C., where he became translator of Oriental medical books in the Surgeon General's Library in the Army Medical School. During this time he also attended Columbia University, where he received his B.S. degree.

It was this close association with medicine, with Dr. Billings, head of the Library, and with Dr. Gray, head of the Surgeon General's Laboratory of the Army Medical School, which made Philip decide to become a doctor. He entered George Washington University as a medical student in 1892. About this time, Dr. Walter Reed became head of the Museum Laboratory and he was destined to exert great influence on Philip's life. He became much interested in Philip as he watched the young student study in the Army Medical Museum. They became fast friends and attended bacteriology and pathology lectures in Baltimore under Dr. William H. Welch. Later Philip worked steadily with Dr. Reed in the laboratory. It was because of Dr. Reed that Philip decided to specialize in pathology. After graduating from medical school he was appointed pathologist to Garfield Memorial Hospital in Washington, D.C. Later he studied at the Wistar Institute of Philadelphia and at the University of Pennsylvania Graduate School of Medicine. Thus Philip was the first Korean to become an American citizen, the first to be employed by the American government, and the first to become a doctor of medicine and a pathologist.

Queen Min was now dead. At the continued insistence of very influential Koreans, Dr. Jaisohn was persuaded to return to Korea, where he became Personal Advisor to the Emperor and Advisor to the Privy Council. His first step was to found the famous Independence Club, made up of many of the most educated and liberal minds of the day; through this Club he introduced into Korea the idea of public forums, where national and international affairs were brought to the people for open and free discussion for the first time. In these town meetings was discussed democracy as it is known in America, and here Dr. Jaisohn introduced the idea of open and free debate on current issues, and again, for the first time, introduced parliamentary law. Here Dr.

PHILIP JAISOHN, M.D.

Jaisohn laid the foundation for Korean independence and democracy. Over and over he preached the importance of "government for the people" and in turn preached the responsibility of the common man for good government.

His second step was to found *The Independent,* the first newspaper in the long history of Korea. In this was printed national and international news and Dr. Jaisohn fearlessly exposed the corruption in government and ceaselessly advocated the ideals of democracy. He fought endlessly for independence and democracy and the rights of the common man; he helped to build the famous Independence Arch as a symbol of independence from China.

At this time, Korea, always a strategic nation geographically to Japan, China and Russia, was a pawn for the diplomats of those countries, each trying to secure a footing in the country by one means or another. Dr. Jaisohn, realizing that the fate of the nation was at stake, fought all of them, exposing their plots in his public meetings and in his newspaper, thus inciting their hatred for him. As time passed his work bore great fruit. The people began to awaken to the fact that the common man was an individual of dignity and importance, that government, after all, was for the benefit of all the people. Dr. Jaisohn became such a power that the Emperor became afraid of him, as did the officials of Russia and Japan. But he determined to bring education and equality to the great masses of the people, and through his public forums, his newspaper, his classes at Pai Chai School, he preached tirelessly and fearlessly the ideals of democracy, the dignity of the common man, the necessity for education, and the responsibility of every one to his country.

A plot to assassinate him, by the Japanese, was uncovered, and as he grew in power so did his enemies increase. There were big and little plots against him. One by one his friends, afraid for their lives, dropped away. His offices were set afire, secret orders were issued throughout the land to stop delivery of the newspaper. Veiled threats were a part of his daily life. He found it increasingly difficult to carry out his program. In time he stood alone, but the great masses of the people at last realized his great love for them and what he was trying to do to help them. For this he is called "The Father of His Country." When, by a ruse, he was finally influenced to return to America, he left behind him a burning zeal in the hearts of the Korean people to fight for all the ideals he had preached. And the spirit of democracy with which he had imbued the nation has flowered in their bitter fight for freedom.

Dr. Walter Reed asked him to participate with him in the war on yellow fever in Cuba, but Dr. Jaisohn returned to America too late to join him.

In 1919 he again returned to world affairs to take up the cause of Korean independence after the general uprising of that nation against Japanese tyranny and torture. He organized "The Friends of Korea," and going from one end of the United States to the other, he brought the attention of the world to "The Case of Korea." Through his work in the Disarmament Conference in Washington in 1922, a resolution was presented to request the Japanese to cease their torture of Korean patriots. This helped in the release of 180 patriots and the cessation of open atrocities. In 1924, at the Institute of Pacific Relations Conference in Honolulu, Dr. Jaisohn introduced another indictment of Japan in the tyranny of Korea.

The following years, though he worked always for Korean independence, were devoted largely to medicine. He was on the staff of Jeanes Hospital (cancer), Philadelphia, as pathologist and on the staff of various hospitals in the East. He was Chief of Dermatology at Chester Hospital, Chester, Pennsylvania, and in addition had his own private practice.

In 1947–48 Dr. Jaisohn was sent by the War Department to Korea as Chief Advisor on Korean Affairs to Lt. General John R. Hodge, Commanding General of the United States Armed Forces in Korea. Working with General Hodge and also with General William Dean, Military Governor of Korea, and others, Dr. Jaisohn helped to draft the Constitution of the Republic of Korea. During the period of the formation of the Republic Dr. Jaisohn was strongly urged by his friends to accept the nomination of the President of the Republic. He declined on the grounds that "I am an American citizen and intend to remain so." He returned to the United States after the formal establishment of the Republic and resumed private practice.

In 1947–48 he was President of the Korean Red Cross and at the time of his death was Honorary President of that organization. He was a member of the American Medical Association, the American

Society of Clinical Pathologists, the Medical Society of the State of Pennsylvania, and the Delaware County Medical Society. He was elected to membership in the old Medical Association of the District of Columbia in 1895 and to Active membership in the Medical Society of the District of Columbia in 1928. In 1929 he transferred to Associate membership, because he was then affiliated with St. Joseph's Hospital in Reading, Penna., as Director of Laboratories. He was an honorary member of the Rotary Club and a 32nd degree Mason.

He was the author of one book, "Hansu's Journey," and a number of articles in medical journals. He has written innumerable articles on Korea and the Far East. He received four citations from President Roosevelt and one from President Truman during the years 1941 to 1945. In 1945 he was awarded the Congressional Medal of Merit for meritorious service during the War. He was also cited by the American Legion in 1946.

He was married to Muriel Buchanan Armstrong, the daughter of Colonel George Buchanan Armstrong, founder and later General Superintendent of the United States Railway Mail Service. Colonel Armstrong is credited with the idea of putting the Post Office "on wheels" and he designed the first railway mail car. Mrs. Jaisohn was cousin to James Buchanan, fifteenth President of the United States. Through her direct descent from Katherine King, she was a Daughter of the American Revolution. She was also an artist in her own right. There are two daughters, Stephanie J. (Mrs. Paul C. Boyd), who lives in New York City, and Miss Muriel Jaisohn, of Media, Pennsylvania.

Dr. Jaisohn passed away in Media, Pa., January 5, 1951, at the age of 81 years, actively engaged in medicine until the end.

MURIEL JAISOHN

Treatment of Cancer—Klopp

(Continued from page 302)

The patient is encouraged to swallow the balloon, which is then inflated and rubbed against the stomach wall. Surface cells, scraped from the stomach wall by the veil, cling to its strands. The balloon is now deflated, withdrawn, and rinsed. The rinsing fluid is centrifuged; the cells concentrate in the base of the vessel. These are then transferred to a slide, fixed, stained, and studied. A diagnosis of the presence or absence of cancer can be made, at least in Papanicolaou's hands, with a very high degree of accuracy. Use of this method may allow the surgeon to find more resectable and potentially curable cases among those which he is called upon to explore.

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Prothrombin Concentration—Peery, Miller and Rullis

(Continued from page 306)

determined by the 1-stage test with the use of whole plasma. A group of 43 patients with myocardial infarction who had an initial prothrombin concentration of 50 per cent or greater was used as controls. The study group and the control group were compared in an attempt to learn the significance of the low prothrombin level before dicumarol therapy. There were no important differences between the 2 groups with regard to age, sex, drugs taken, fever, anemia, or evidence of congestive heart failure. Certain disorders, including hypertension and thromboembolism, occurred somewhat more frequently in the study group than in the control. Patients having initially low prothrombin levels required slightly less dicumarol to achieve and maintain a therapeutic level of prothrombin than did the control patients. The mortality over a 10 to 25-month period was more than twice as great among patients with initially low prothrombin values as among those with more nearly normal values.

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Flatfeet in Children—Kite

(*Continued from page 318*)

Summary

Flatfoot deformity in children is due to a muscle imbalance. The muscles on the lateral side of the foot work at an advantage and pull the foot into a flatfoot position. Mild cases may be treated by swung-in shoes alone. The more severe flatfeet need manual stretchings in addition to swung-in shoes. Older children are taught exercises. Arch supports are used only occasionally for the more severely deformed feet. Satisfactory results may be expected if the treatment is begun early and followed persistently.

Medical Bowlers

(*Continued from page 336*)

with a set of 403. Dr. Perkins came in second with 401, Mr. Baiers was third with 397. High game was won by Dr. Musser with 130. Dr. McLain rolled 128 to take second.

Physicians or dentists wishing to join the D. C. Medical Bowling League next season should register with Dr. Klepser, President, Dr. Van Kinsbergen, Vice President, or Mr. William B. Cochrane, Secretary-Treasurer.

Education of Nurse—Fisher

(*Continued from page 339*)

so that we won't have constantly the pressure for more hospital beds and more admissions when those admitted, medically speaking, could better have been taken care of had they been seen early in their illnesses or before the illnesses occurred, and the services rendered efficiently at home, or in the group clinic, or at the doctor's office."[9]

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COMMUNITY HEALTH AND MEDICAL IMPLICATIONS OF NARCOTIC ADDICTION

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Legal History and Background

INTEREST in the narcotic problem on a national scale spearheaded action by the Federal Government in 1909, at which time a law was created to prevent the importation of opium for smoking purposes. Growing concern over the problem led to the passage of the Harrison Narcotic Law in 1914, designed to restrict the use of opium and cocaine to medical purposes only. This law has reduced the incidence, but one serious defect in the law remained—it did nothing for the addict in the way of treatment or rehabilitation. Subsequently, in 1929 Congress passed an Act establishing two farms for narcotics. These two institutions are now in operation at Lexington, Kentucky and Fort Worth, Texas for the purpose of restoring addicts to health and to rehabilitate and train them to become self-reliant and self-supporting citizens. Only addicts to habit-forming drugs are eligible for treatment, and the drugs covered by the Harrison Narcotic Act are opium, cocaine, Indian hemp, peyote or Mexican cactus, and the various alkaloids, compounds, salts, preparations and derivatives of these drugs. Patients come under two categories, (1) those under sentence by the courts, or (2) voluntary patients.

The Marihuana Tax Act of October 1937 completes Federal legislation on habit-forming drugs to date, although habit-forming drugs are not confined to this group but include a host of hypnotics which should come under Federal legislation.

With reference to the *modus operandi* of handling voluntary patients and patients under sentence, the former may apply to the United States Public Health Service, which operates the hospitals, after which the Surgeon General requires a physical examination by a qualified physician, who states whether or not the patient is an addict.

Sentenced prisoners are sent to the hospitals or penitentiaries, depending upon whether or not there seems to be best prospects for cure by intensive treatment. By legal definition a patient is not cured until he has regained the power of self-control, which varies from a minimum of 4 months' treatment to an average of 6 months, with a maximum of 9 to 12 months. According to follow-up studies by the United States Public Health Service, 54 per cent of discharged men and 61.5 per cent of discharged women have not been reported to any institution or held for any law violation because of drug addiction.

ESTIMATION OF CASES IN UNITED STATES

At the time of the passage of the Harrison Narcotic Act in 1914 it was estimated by Kolb that there were 150,000 to 200,000 narcotic addicts, mostly women, in the United States. Recent estimates[1] indicate that there is approximately 1 addict per 3,000 population, or a total of 48,000, mostly men, in the United States. It is significant in passing to note that in the more recent decades the incidence has become relatively larger among males of the population.

EFFECTS OF DRUGS USED BY ADDICTS[2]

Alcohol. The signs and symptoms of alcoholism are too well known to need detailed description. In the early stages there is usually exhilaration, elation, and increased loquaciousness. This is followed by a state of drowsiness, ataxia, lack of muscle coördination, and, finally sleep. There may be a bulging of the eyes, or inflammation of the eyes, slurring of speech, and emotional silliness. Often the odor of alcohol may be detected. Prolonged, excessive drinking may lead to acute mental disturbances, marked by delirium with trembling and great excitement (delirium tremens). These conditions and convulsions, a series of violent contractions, may develop after sudden withdrawal of alcohol.

Marihuana (Hemp, Hashish). Smoking marihuana produces symptoms of mild intoxication. The individual may show silly behavior, be dreamy, and have his speech and thought disconnected. Marihuana smoke is an irritant to the eyes. It is the unfertilized flower of the female plant that is smoked which causes the addiction. The manner of smoking marihuana is different from the smoking of tobacco. The smoker takes quick, short puffs, and frequently cups both hands over the mouth to increase the amount of smoke inhaled. While marihuana, by itself, is comparatively harmless, it becomes dangerous because it leads to taking heroin for a greater "kick." If a supply of marihuana is lacking, some addicts will resort to use of large doses of aspirin dissolved in cola drinks. When marihuana is withdrawn, there may be a marked restlessness and a high state of irritability.

Amphetamine (Benzedrine). This is not a narcotic but is habit-forming and thus is included here. Amphetamine stimulates an individual to great hyperactivity. Persons may become jittery and highly nervous. With addicts, benzedrine is added frequently to soft drinks. Fillers from inhalers are soaked in the drink. Benzedrine inhalers may also be used to excess to give the same stimulation and reaction. When amphetamine is withdrawn, the person becomes sleepy and groggy.

Cocaine. The results obtained from the use of cocaine are similer but more pronounced than those resulting from the use of benzedrine. The person cannot stand still. The after-effects are complete exhaustion. When cocaine is withdrawn, the person becomes lackadaisical, sleepy and groggy, and may experience convulsions.

Morphine Group. Included in this group are morphine, codeine, and heroin, and the more recently developed synthetic substitutes for morphine, such as demerol and methadon. The opium derivatives are used in medicine to combat pain. Morphine and newer synthetics and codeine which have the same effect are mostly used in medical practice. No signs and symptoms of addiction to opiate drugs are characteristic. Addicts frequently spend their entire income, and more, on drugs, and do not eat. Therefore, most addicts are emaciated. Drug peddlers are, as a rule, addicts themselves and thus resort to stealing and other crimes to obtain money for the drugs.

Heroin. This is a particularly dangerous drug of the morphine group. It is a highly potent opiate. It is even unlawful for a physician to have heroin in his possession. Since it was outlawed by the American Pharmaceutical Association over 25 years ago, it may be obtained only through illegal sources, hence its direct link with crime. Heroin may be sniffed or injected by a hypodermic needle. Following a 'bang'' (injection or shot) the person is hyperactive, alert, and highly stimulated. It causes the sensation of floating in the clouds, shakiness, irascibility, short quick temper, and fits of rage. There may be needle marks and scars from the injections and scratch marks on the body because of itching. Scars in the bend of the elbow due to intravenous injections are definite indications of addiction. When heroin is withdrawn, there are sneezing, excessive perspiration, watering of the eyes (lachrymation), and loss of weight. The only conclusive proof of addiction to opiates is the person's behavior after withdrawal. When the individual has been unable to provide himself with the drug for a period of over 24 hours, very serious symptoms will develop. This can only be overcome by another dose of the drug.

Sleeping Pills (*Barbiturates*). Sleeping pills are designed to put people to sleep by depressing the function of the brain. True addiction to sleeping pills is rare, particularly among adolescents and young adults. One suffering from sleeping pill addiction shows symptoms of the drowsy stage of intoxication. There may be a marked deviation from the normal as inhibitions are relaxed. The individual is unable to coördinate; for example, he cannot touch the nose with the index finger. When the sleeping pills are withdrawn he may experience convulsions.

As with other diseases early detection means early cure. This brief résumé of signs and symptoms of drugs and narcotics which may cause addiction is only a guide—a guide to be used intelligently to observe the signs and symptoms early.

Factors That Predispose to Addiction

Preliminary to this consideration a definition of addiction becomes imperative. For most purposes an addict is described as a person who has developed a tolerance to gradually increasing doses of a narcotic drug; who has become dependent upon a drug or habituation; and who, after a period of continual use of the drug, demonstrates certain well defined physical signs and symptoms when subjected to abrupt abstinence.

Medical and Social Background of the Addict

When a child is born into the world he is a victim of "stress" with which he is totally inadequate to cope. The need for food, warmth, and security produce patterns of "anxiety" which develop early and extend through adolescence into adult life. The stress or need for proper attention on the part of others, interest in his welfare, love and security, if lacking, may color his future. Such a child may become hostile, lonesome and without warmth or feeling for others. Under such conditions, "anxieties" develop to the extent that little time is left for the development of normal external relationships.[3, 4]

It should be clearly understood that each of us has to handle our own problems of "stress" or tension, and we develop patterns according to our emotional equipment and security. Fortunately, for the vast majority of individuals there is a relatively high "tolerance" for emotional stress, conflict, and anxiety. As the average child comes to puberty he passes through the "storm and stress" period satisfactorily and reaches a new equilibrium on the level of the adult in terms of sex, work, and interpersonal relations.

This is not true of the pre-addict. He remains hostile, insecure, immature, and emotionally unable to adjust himself in society. Such a person is easy prey for drugs in that he, erroneously, of course, is led to believe by other addicts that drugs will make him feel "normal."

Contrary to some popular beliefs, the pre-addict is deserving of much greater sympathy and understanding than is furnished at present. The problem of the prevention of narcotism beyond the present mechanisms of law enforcement is community-wide and embraces a broad public health concept of prevention. Specifically, this approach should deal with the environmental factors that predispose to the development of narcotism. If the individual is lonesome, hostile and misunderstood, correction should be made through a sympathetic approach to the problem on the part of all professions and agencies that deal with child guidance problems, whether governmental or private. In this connection, the home, school, church, and playground offer monumental approaches to the problem for good. Their opportunity to be of help not only constitutes an opportunity but a responsibility. The Police Boys Club is a classic example of approach in the right direction. There are a number of agencies, of course, working toward the same goal. This work should be continued in an effort to make useful citizens in communities where opportunities for development are below standard or entirely lacking. On the part of the medical, nursing, and teaching professions, through adequate appropriation of funds, opportunity should be afforded for an approach into the home and environmental factors that lead to narcotism.[5]

The schools probably offer the greatest opportunity in the way of prevention, since it is there that the teacher, physician, and public health nurse meet the problems of health of school children on a common level; and through the interchange of information upon home and environmental conditions emphasis may be focused upon the particular and peculiar problems of the child. With such a community-wide program, the lonesome and insecure child will come to realize that he is not friendless, misunderstood and unwanted. It should be emphasized that such an approach is not solely the responsibility of one segment or group in the community. For instance, the problem cannot be left solely to the school physician, who could presumably conduct physical examinations in the schools, to determine which children were addicts and which were not, as was recently suggested for this community.

According to reports, such an approach, if physically possible, would be harmful generally to the school population, productive of little in the way of results, and probably demoralizing to suspected, but innocent children because of uncertain or misconstrued symptoms.

For example, if a child were singled out among the school children as a suspect because of contracted pupils of the eyes and a skin rash, both symptoms referable to addicts, great harm might be done because these symptoms are also referable to other conditions.

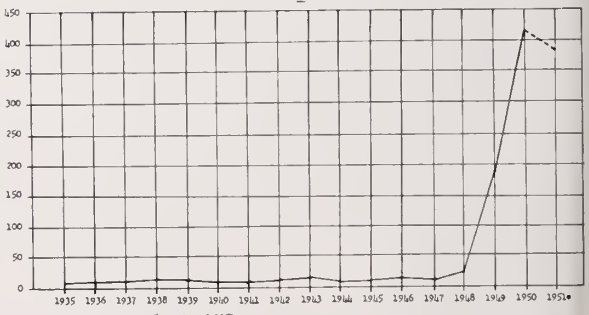
Addiction among Adolescents

Recently much attention has been directed to the problem of drug addiction among adolescent groups. As recently as 1946 only 3 per cent of the 4,000 yearly admissions at Lexington (Kentucky) Hospital were under 21, while most recent figures indicate that 18 per cent are under that age. These figures show that there has undoubtedly been an increase in narcotic addiction among adolescents. Graph 1 shows yearly admissions under 21 since 1935 at that hospital. A precipitate rise in cases occurred in 1949 and in 1950 to more than 400 cases. To further emphasize the point the average age of the addicts at Lexington dropped from 37 to 25 in the period between 1946 and 1950.[6,7]

GRAPH 1

Addict Admissions in Lexington Hospital under Age of 21

1935–1951



* Estimate based on first 5 months of 1951

Table 1 shows the age and sex distribution of cases in the Lexington Hospital on February

27, 1951. It will be noted that the incidence increased precipitately beginning at the age of 16 to the age of 20 among males, while among females the incidence increased little until after the age of 20. It would appear from these figures that the problem among adolescents is particularly concerned with boys in their teens.

TABLE 1

Age Distribution of Addicts in Lexington Hospital on February 27, 1951

AGE	TOTAL	MALE	FEMALE
All Ages	1,254	1,066	188
15	2	2	—
16	9	9	—
17	22	20	2
18	44	41	3
19	44	37	7
20	59	53	6
21	59	55	4
22–30	362	315	47
31–40	238	180	58
41–50	241	195	46
51–60	140	128	12
60+	34	31	3

Distribution of Addicts in Lexington Hospital by Race and Sex on February 27, 1951

All Races	1,254	1,066	188
White	707	559	148
Negro	510	471	39
Chinese	33	33	—
Indian	1	—	1
Other	3	3	—

Figures for the District of Columbia are based on records in the files of the Metropolitan Police Department for the period 1950 and 1951 to October 10, 1951, when 255 cases under the age of 30 were recorded (tables 2 and 3). Of this number 221 were male and 34 female. Here again, as among the cases at Lexington, earlier age incidence among males is apparent, reaching a peak or plateau between the ages of 21 and 23. By 5-year grouping of age it is seen that there were no cases under the age of 15, and that the 5-year period of greatest incidence, 128 cases, is between the ages of 20 and 24, which is just over 50 per cent of all cases under the age of 30.

TABLE 2

Narcotic Addicts, under Age 30, by Age and Sex, 1950 and 1951 (to October 10, 1951) as Recorded in the Metropolitan Police Department Files, D. C.

AGE	MALE	FEMALE	TOTAL
All Ages	221	34	255
16	4	0	4
17	6	3	9
18	12	1	13
19	7	1	8
20	14	0	14
21	28	5	33
22	23	3	26
23	28	2	30
24	23	4	27
25	19	5	24
26	14	3	17
27	12	1	13
28	13	3	16
29	17	3	20
Not Known	1	0	1

TABLE 3

Narcotic Addicts, under Age 30, by Race, Sex and Age, 1950 and 1951 (to October 10, 1951) as Recorded in the Metropolitan Police Department Files, D. C.

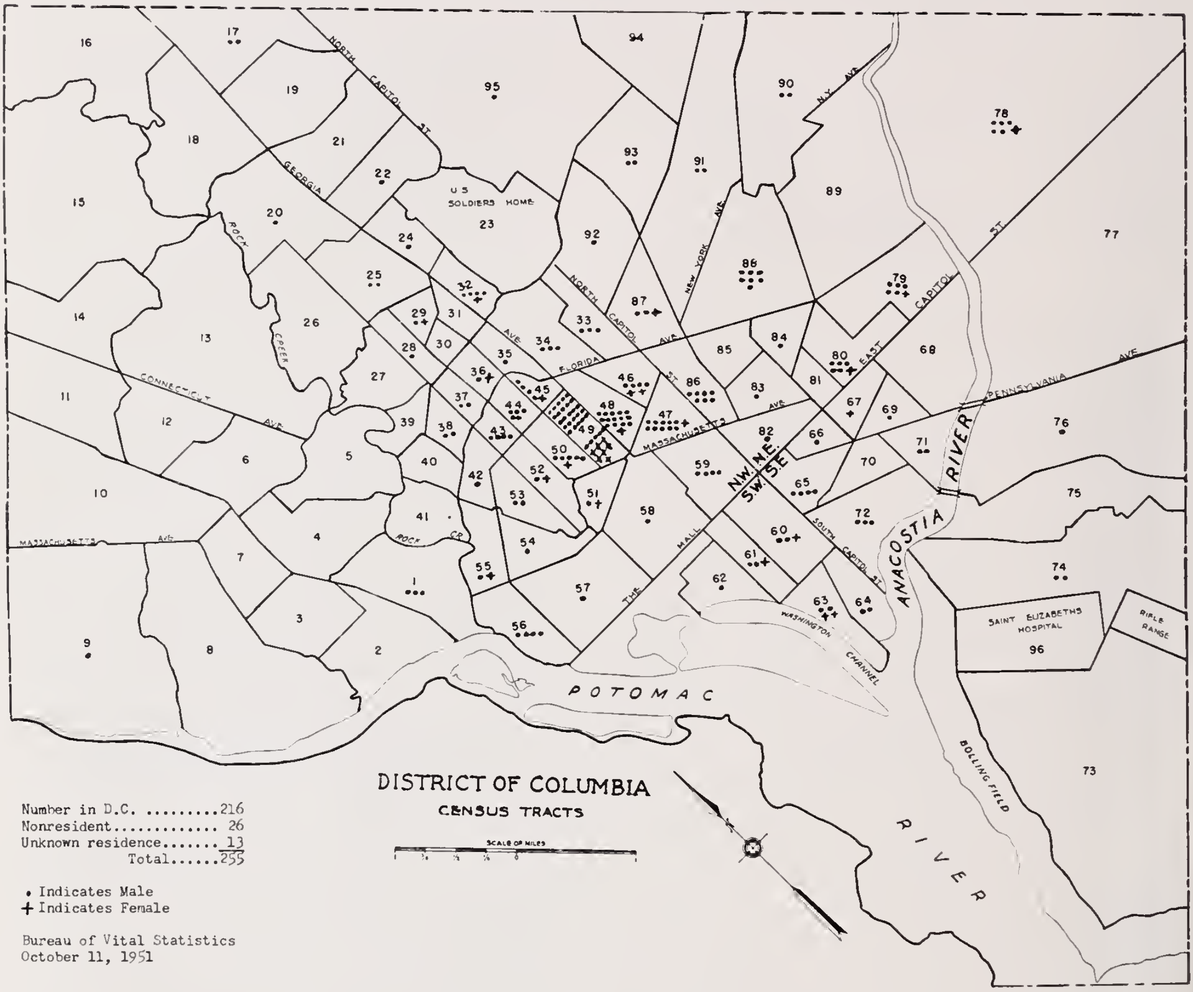
AGE GROUPS	TOTAL	MALE		FEMALE	
		White	Colored	White	Colored
All Ages	255	44	177	4	30
Under 15	0	0	0	0	0
15–19	34	8	21	0	5
20–24	128	26	89	2	11
25–29	93	10	67	2	14

THE CHANGING SEX PATTERN

It has been stated previously that national figures indicate a swing from greater prevalence among females to males during recent years. Admissions to the Lexington Hospital clearly indicate this trend (table 1). Of the total number of 1,254 patients in the hospital, 1,066 were male and 188 female, or 85 and 15 per cent respectively. Of the 255 addicts under the age of 30 apprehended by the Washington Police

MAP 1

Narcotic Addicts, under Age 30, 1950–1951 (to October 10) as Recorded in Metropolitan Police Department Files

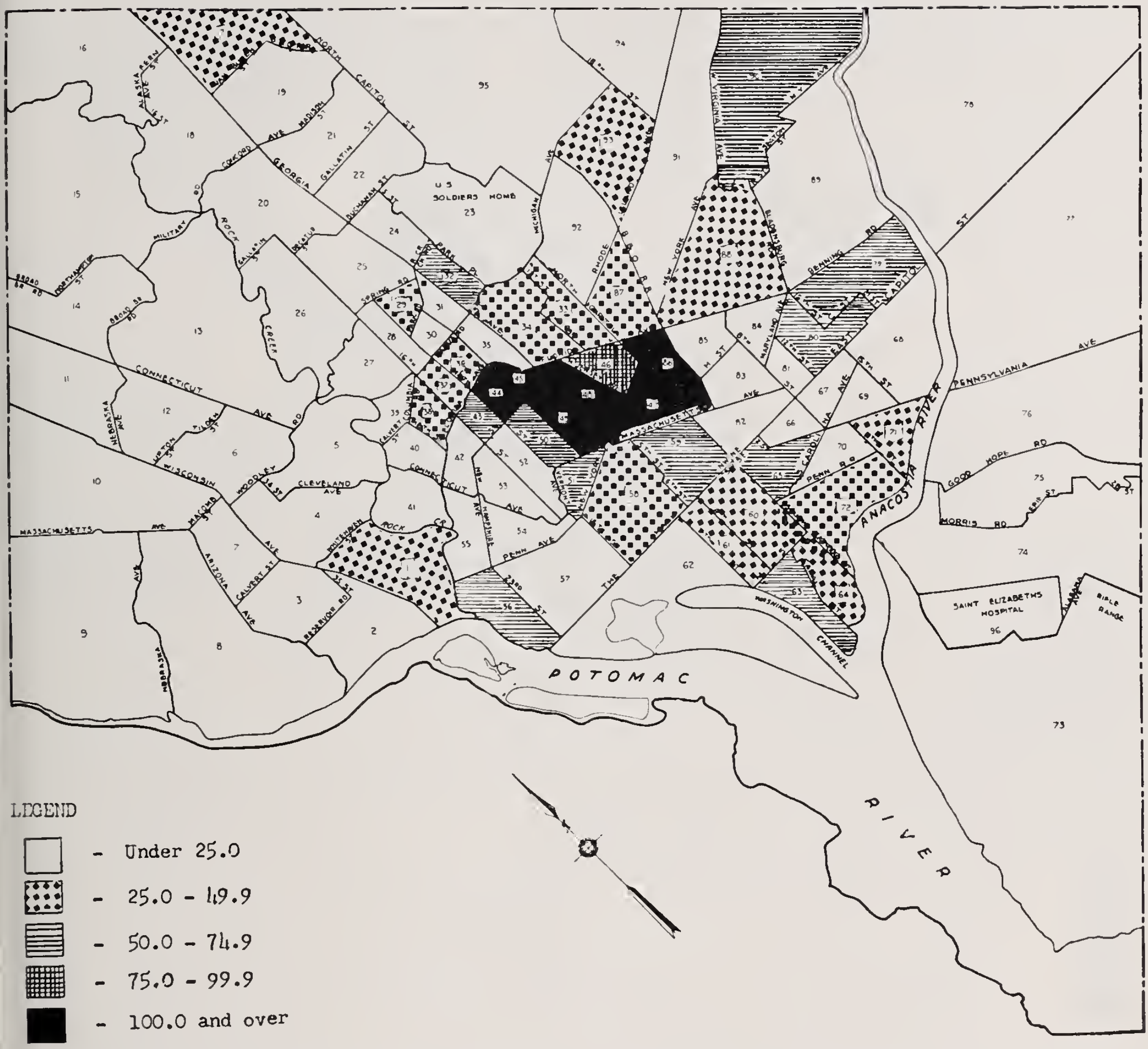

NORTH CAPITOL ST
U S SOLDIERS HOME
GEORGIA
ROCK CREEK
NEW YORK AVE
N.Y. AVE
NORTH CAPITOL AVE
FLORIDA
CONNECTICUT AVE
MASSACHUSETTS AVE
EAST CAPITOL ST
PENNSYLVANIA AVE
NW NE
SW SE
SOUTH CAPITOL ST
THE MALL
ANACOSTIA RIVER
WASHINGTON CHANNEL
POTOMAC
SAINT ELIZABETHS HOSPITAL
RIFLE RANGE
BOLLING FIELD
RIVER
DISTRICT OF COLUMBIA
CENSUS TRACTS
SCALE OF MILES
Number in D.C. 216
Nonresident............ 26
Unknown residence....... 13
Total......255
● Indicates Male
+ Indicates Female
Bureau of Vital Statistics
October 11, 1951

(table 2) 221 were male and 34 female, or 87 and 13 per cent respectively (see also map 1). Of the reason for the change of pattern from predominately females to males, there is room for conjecture. Some light is thrown on the problem, however, when it is kept in mind that the prenarcotic is an insecure and immature individual. The social and economic position of women during the last few decades has changed from insecurity and dependence to one of security and freedom to develop independently in all the trades and professions.[8]

Weighing still more heavily in the scale of a greater preponderance of males as potential narcotics is the fact that during the past 3 decades the Nation has fought 2 global wars, and is now fighting on a major scale in Korea, with the possibility of still another global conflict looming on the horizon. The high school boy of today looks with uncertainty toward the future in so far as his individual security is concerned. Washington statistics indicate a younger age and a greater incidence among males in the teen-age group (table 3). A better understanding of this group together with counsel and guidance is imperative to bring them to realize that,

MAP 2

Case Rate per 100,000 Population

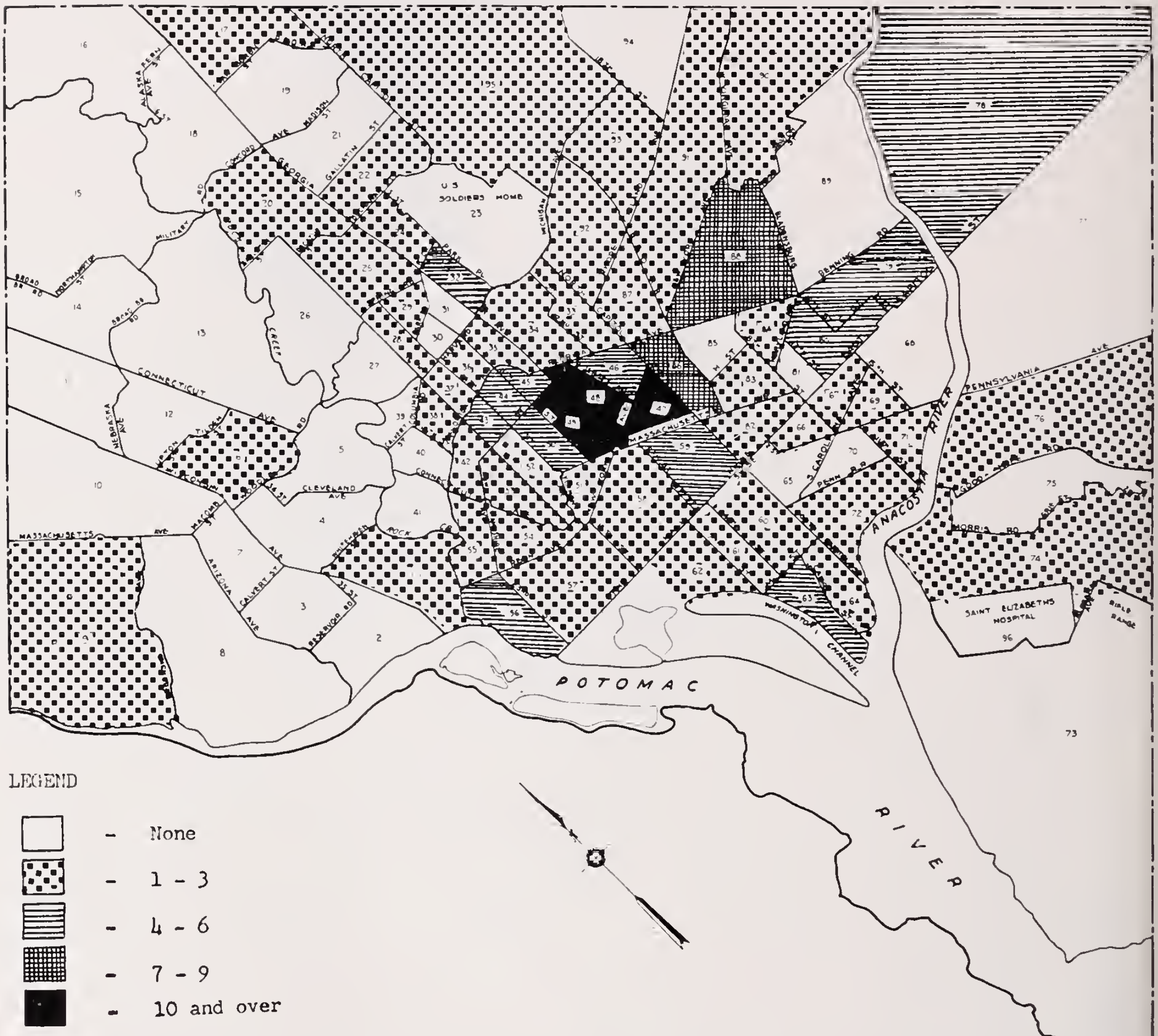

U S SOLDIERS HOME
POTOMAC
RIVER
ANACOSTIA RIVER
SAINT ELIZABETHS HOSPITAL
WASHINGTON CHANNEL
CONNECTICUT AVE
MASSACHUSETTS AVE
PENNSYLVANIA AVE
NORTH CAPITOL ST
GEORGIA AVE
NEW YORK AVE
RHODE ISLAND AVE
WISCONSIN AVE
NEBRASKA AVE
BENNING RD
GOOD HOPE RD
LEGEND
☐ - Under 25.0
▩ - 25.0 - 49.9
☰ - 50.0 - 74.9
▦ - 75.0 - 99.9
■ - 100.0 and over

except for casualties which may occur in any walk of life, the experience gained during a period of military service may be beneficial later in life. It is significant that among the Washington juvenile cases only 3 patients were in school when apprehended by law enforcement agencies.

With reference to geographical distribution of cases, records at Fort Worth and Lexington indicate that 87 were from New York, 24 from Chicago, 15 from Washington, and 32 from other locations. Spot maps 2 and 3 show a definite pattern of concentration of cases in the Northwest central area in census tracts 47, 48 and 49, where map 1 represents number of cases and map 2 the case rate per 100,000 population. It is in this area, with its unsatisfactory housing conditions, that greatest truancy among school children, greatest number of law violations, and the greatest problems of health occur. The health problems are so acute and continuous that the Health Department has for years attempted to establish a modern health center in this area. It is definitely the number 1 area

MAP 3

Concentration of Addicts


U S SOLDIERS HOME
CONNECTICUT AVE
MASSACHUSETTS AVE
CLEVELAND AVE
MILITARY RD
GEORGIA AVE
PENNSYLVANIA AVE
ANACOSTIA RIVER
SAINT ELIZABETHS HOSPITAL
WASHINGTON CHANNEL
POTOMAC RIVER
LEGEND
None
1 - 3
4 - 6
7 - 9
10 and over

of greater incidence and higher mortality from most diseases.

This paper was prepared to bring into focus the health and medical aspects of drug addiction and not law enforcement. Yet no consideration would be complete without reference to vigorous attempts to apprehend, prosecute and place heavy sentence upon addicts and peddlers. In cities like Memphis and Atlantic City, where dope peddlers were sentenced 7 years in the former and 5 years in the latter, drug traffic has disappeared, according to Harry J. Anslinger, Commissioner, U. S. Bureau of Narcotics.[9] Short sentences tend to discourage drastic action on the part of the police. Sentences of only 2 or 3 months, according to enforcement officials, have little effect upon the traffic in narcotics. Bills introduced into the Congress by Senator Dirksen of Illinois and Representative Boggs of Louisiana provide 2 years for the first offense of selling illegal narcotics.

According to the U. S. Bureau of Narcotics the "teen agers" are themselves the greatest spreaders of the "habit." One addict dares another to try it, and thereby the vicious circle widens. The juvenile addict, when apprehended, therefore, must be quarantined until cured. In this community the problem can be handled satisfactorily only through adequate law enforcement methods, quarantining of addicts, and a proper evaluation and sympathetic understanding of the problems of adolescents directed at and brought to the adolescent. Much of permanent character building can be accomplished in the latter category, but this community can ill afford leniency toward peddlers of narcotics if best results are to be obtained.

SUMMARY

Attention has been sharply focused on drugs and narcotics as a contributory factor to crime by recent Nation-wide crime investigations. The problem is not new but is being reëmphasized by sociologic conditions relating to the present chaotic world conditions.

Drugs and narcotics to which adolescents and adults become addicted are chiefly alcohol, marihuana, amphetamine, cocaine, the alkalates of the opium groups, and sleeping pills. With the exception of amphetamine and cocaine all of these are stupefying drugs, all having dulling effects on the individuals.

Contrary to some popular beliefs, the pre-addict is deserving of much greater sympathy and understanding than he receives at present. The prevention of narcotic addition goes beyond the present mechanisms of law enforcement. It is a community-wide problem and embraces a broad public health concept of prevention. The home, the school, the church, the playground, in fact, all agencies in the community, must coöperate in approaching the problem rationally. We must revamp our thinking about drug addiction as we have about alcoholism. It is time for this community to face the fact that drug or narcotic addiction is a sickness.

Addiction among adolescents, as shown by the upsurge of admissions to the Lexington (Kentucky) Hospital between 1946 and 1950 has increased tremendously. The average age of addicts there has dropped from 37 to 25 in this 5-year period. Of the 255 persons under the age of 30 recorded in the Metropolitan Police Department in 1950 and 1951, just over 50 per cent were between 20 and 24 years old.

During recent years there has been a definite change in the sex pattern of drug addicts from greater prevalence among females to a greater prevalence among males. In the Lexington Hospital in February 1951 85 per cent were males; in Washington's police files (1950–1951) 87 per cent were males.

Penalties of the severest nature should be meted out to those who peddle and pander to the cravings for drugs. Short sentences tend to discourage drastic action on the part of the police and other enforcement agencies. This community can ill afford leniency toward peddlers of narcotics if best results are to be obtained.

The most important step in controlling teen-age, or other, addiction is the providing of good homes and the security that goes with the good home situation. The problem confronting us is not new. It is not insurmountable. It does, however, require intelligent observation, sane and coöperative action on the part of all who are concerned with the health of the public—parents, teachers, physicians, nurses, and school and public officials.

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ASYMPTOMATIC MYOCARDIAL INFARCTION

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THE evaluation of coronary artery disease and the effect on the functional ability of the myocardium is a difficult problem. In many cases of severe angina of effort, electrocardiographic evidence of abnormality may be absent at rest and sometimes after exercise. In some otherwise normal adults marked abnormality in the electrocardiograph may occur. In some of these cases there may be no symptoms, and the clinical evaluation of exercise tolerance may be excellent.

It is quite probable that clinical data will underestimate the incidence of myocardial infarction among the general population. This is due to myocardial infarction in the absence of symptoms or very mild atypical symptoms (the physician may not see these people), and infarction may occur at sites that are not accessible to ordinary electrocardiographic exploration. The latter is especially true in posterior wall locations with horizontal electrical positions.

In a recent study of 228 normal adults the deviations of the RS-T segment and T waves were studied in relation to single and double "2-step" exercise electrocardiograms.[1] Normal standards for exercise tests were postulated from this group study. Since that time I have completed an examination of 272 additional normal adults using the double "2-step" exercise electrocardiogram and the velocity ballistocardiograph. It is important to note that the clinical material used is from a group of people whose physical condition may be important to public safety.

In this total group of 500 normal adults who denied symptoms referable to the cardiovascular system, a total of 12 persons showed electrocardiographic evidence of previous myocardial infarction. Six of this group of 12 had previous mild symptoms that may have been due to myocardial infarction. In this group of 6, 2 had previous mild attacks of "acute indigestion" with epigastric pain, 2 had fainted several years previously without any pain, 1 had pneumonia with severe pleurisy 10 years previous to the electrocardiograph tracing, and 1 had had several bouts of tachycardia of short duration without pain. The remaining 6 cases denied any symptoms that might be a clue to the occurrence of the infarction.

In the normal sample group of 500 adults, 62 per cent, or 310 persons, were over 35 years of age. In the group of 12 patients showing evidence of previous myocardial infarction, all were over 35 years of age. Three of the 12 were between 35 and 40 years of age, and the other 9 were over 40 years of age.

If the abnormal electrocardiograms are correlated with the age limitation of 35 years of age, 3.9 per cent of the group over 35 years of age showed evidence of previous myocardial infarction which was asymptomatic at the time of examination and unsuspected by the patient.

The locations of the infarcts electrocardiographically were: posterior, 6; anteroseptal, 5; and anterolateral, 1.

Eight of these 12 patients also had velocity ballistocardiograms taken. All of these 8 showed abnormal ballistic records.[2] Two cases of complete right bundle-branch block were also found in this group of 500 cases. They were not included in the 12 cases considered to show electrocardiographic evidence of previous infarction. One patient with right bundle-branch block was 21 years of age, and the other was 31 years of age. Both patients presented no symptoms and had negative histories, and both had normal velocity ballistocardiograms. Due to controversy at present about the etiology of the right bundle-branch block with normal ballistocardiograms and lack of evidence of heart disease otherwise, it would be unsound to believe that these patients had had previous myocardial infarction.

Three case reports of this group of 12 are illustrated, 1 of anterior and 2 of posterior infarcts.

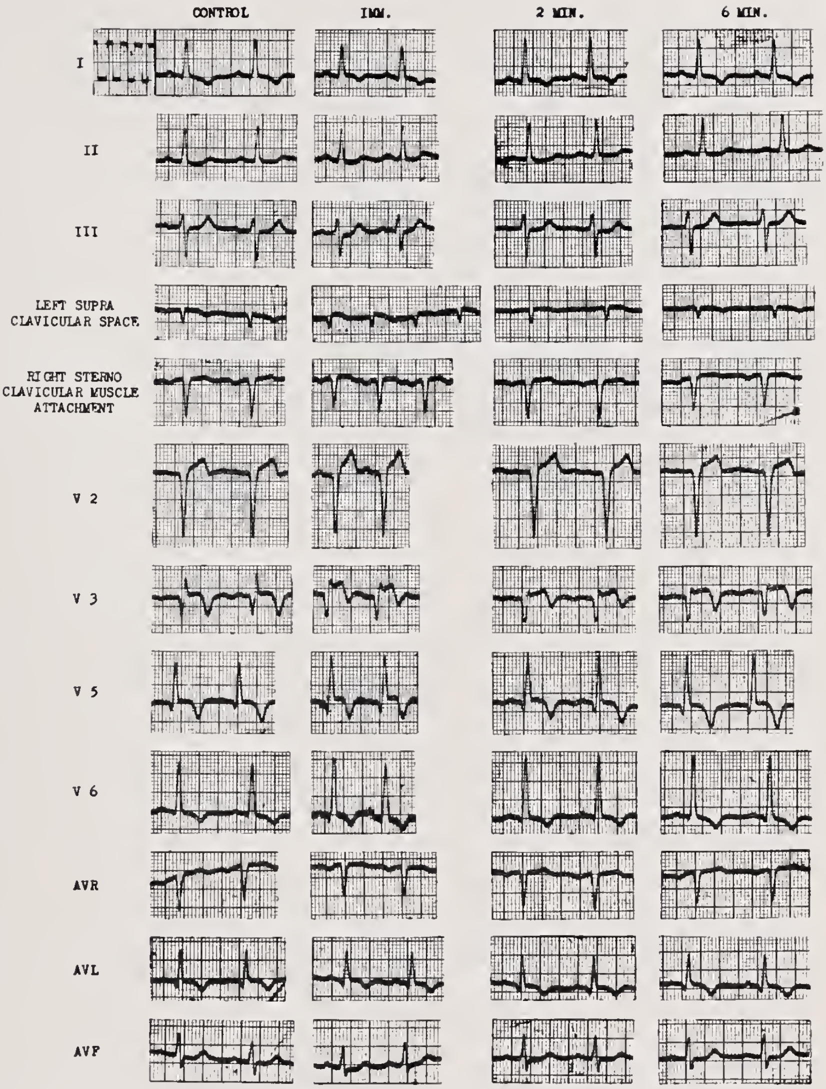
CONTROL
IMM.
2 MIN.
6 MIN.
I
II
III
LEFT SUPRA CLAVICULAR SPACE
RIGHT STERNO CLAVICULAR MUSCLE ATTACHMENT
V 2
V 3
V 5
V 6
AVR
AVL
AVF

FIG. 1. Case 1. Double "2-step" exercise test—positive with evidence of previous anterior wall infarction. Tolerance to exercise was excellent.

ILLUSTRATIVE CASES

Case 1. C. D., a man aged 37, had a negative cardiac history. The blood pressure was 122/74. There was no cardiac enlargement on X-ray examination. He is employed as an air traffic communicator. Subjective and objective response to exercise was excellent. The patient had been issued a large life insurance policy just previous to this examination.

The resting electrocardiogram shows evidence of a previous anteroseptal infarct. Immediately after exercise the RS-T segment became more elevated in V_2 through V_5 and in the left supraclavicular space. This tracing probably represents a healed lesion of the anterior wall with a myocardial "window" as described by Wilson,[3] since the ventricular cavity, as shown in the lead from the left supraclavicular space, shows elevation of the RS-T segment as well as V_3. If this represented epicardial injury only, the cavity deflection of the RS-T would be down instead of upward.

The tracing in figure 1 was the second made on this man 6 months after the original and showed identical findings. In this case the elevation of the RS-T represents myocardial ischemia, since it is transitory, repetitious, and without subjective symptoms. Functional and reversible RS-T elevation is clearly demonstrated. These findings in humans confirm the experimental observations from animals and contribute to the understanding of the effects of myocardial ischemia. Corroborative evidence of acute infarction was lacking, i.e., elevated white blood cell count, abnormal sedimentation rate, and fever.

Case 2. N. R., a man aged 44, had no cardiac history. His blood pressure was 138/86. There was no cardiac enlargement on X-ray examination. The patient stated that he had an attack of "acute indigestion" 4 years previously with mild epigastric pain. He was told by his physician that he had indigestion and low blood pressure. Response to treatment was excellent, and he lost only 4 days of work. It is impossible to be certain that a myocardial infarct had occurred. However, the electrocardiogram is typical of an old healed posterior infarct. Subjective and objective response to exercise was excellent (figure 2).*

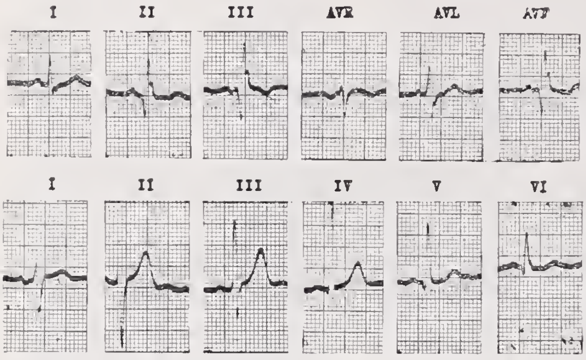

FIG. 2. Case 2. Evidence of previous infarction of posterior wall.

Case 3. E. N., a man aged 51, gave no cardiac history. His blood pressure was 130/84. There was no cardiac enlargement on X-ray examination. The patient had had pneumonia with severe pleurisy 10 years previously at the age of 41, but he did not believe he was seriously ill and remembered none of the details of pleuritic pain. Exercise response, both subjective and objective, was excellent. The electrocardiogram was typical of an old healed posterior infarction (figure 3).

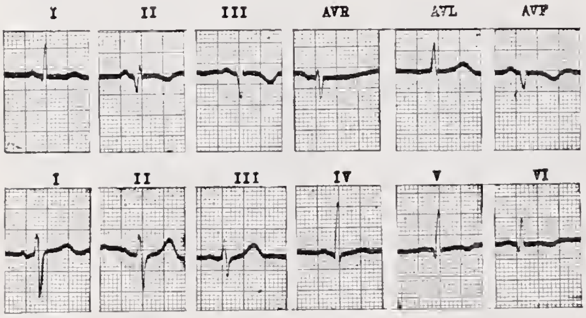

FIG. 3. Case 3. Evidence of previous myocardial infarction of posterior wall. The Q wave and inverted T waves in V_5 and V_6 could be indicative of lateral wall extension.

DISCUSSION

The question might well be asked, "Do these cases actually represent cases of myocardial infarction?" I believe that it is impossible to answer this with absolute certainty until autopsy data are available.

Levine[4] has correlated electrocardiographic data with autopsy records in a large series (150 cases) and found a higher degree of accuracy in old anterior infarcts than in old posterior infarcts. However, his results in 11 cases of old posterior infarcts found at autopsy showed electrocardiographic evidence of the old infarct in 2 cases only. The 2 cases in which there was electrocardiographic evidence of old posterior infarcts were substantiated at autopsy. He found that the positive findings were accurate but that the negative findings could be completely misleading.

The degree of accuracy of the Q_{AVF} diagnosis of posterior infarction is open to question. Positional changes may produce a deep Q_{AVF}. Various criteria have been postulated to establish the significance of Q_{AVF}. Yu and Blake[5] concluded that a Q wave in AVF with a voltage of over 40 per cent of the entire QRS in the same lead with a duration of 0.04 second and an inverted T wave in the same lead were evidence of a posterior wall infarction. The presence of a large Q_2 is additional confirmatory evidence. In all of these cases of posterior infarction the usual criteria were exceeded and a significant Q_2 was present.

Goldberger[6] has stated that with an abnormal Q_{AVF}, lead aVR should show an rS, or QS pattern. If aVR shows a QR, Qr, or a qR pattern, the QR pattern in aVF is probably normal and due to positional changes.

Recently Rubin and Most[7] have cast doubts on Goldberger's conclusions by demonstrating that cases of pneumoperitoneum with marked elevation of the diaphragm can produce deep but reversible Q waves in aVF in patients without heart disease. Also in these normal cases an rS or QS pattern was present in aVR. They postulated that the large Q waves in aVF in their cases of pneumoperitoneum were probably due to rotation of the heart on its transverse axis with elevation of the anterior portion of the heart and a corresponding lowering of the posterior portion with resulting transmission of the electric potential of the posterior basal surface of the heart to the left leg electrode. In the illustrations of Rubin and Most, however, a significant Q wave in standard lead II was absent.

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* This patient died suddenly while swimming on July 6, 1952.

An opinion by a consultant was that 1 of these cases similar to case 1 was that of a congenital defect. It is entirely possible that some process leading to myocardial fibrosis may have taken place at an earlier age. However, we found none of these patterns in persons under 35 years of age, and in 2 of the 12 cases comparison electrocardiograms (standard leads only) taken at 5 and 7 years previously failed to show any abnormal changes. Also, in the 8 of the 12 cases that velocity ballistocardiograms were taken, all were abnormal. The ballistocardiographic deviations from normal resemble the deviations usually found in known cases of healed myocardial infarcts.

The value of the electrocardiogram as a diagnostic instrument must be viewed with some caution and restraint. This is imperative when the electrocardiogram shows no deviation from normal in cases suspected of coronary heart disease. It is probable that 40 to 50 per cent of cases of angina pectoris will have normal resting electrocardiographs. It is also probable that 10 to 20 per cent of cases of coronary insufficiency will not give findings of diagnostic help with exercise tests. Electrocardiographic patterns of healed infarction may possibly be due to causes other than coronary heart disease. The newer technics have expanded the diagnostic value of electrocardiography but have also created new problems of evaluation.

In the follow-up of 12 patients who showed evidence of previous myocardial infarcts, there have been no symptoms or further evidence of myocardial disease in 11. One patient has had to be returned from La Paz, Bolivia (altitude 12,400 feet) because of altitude intolerance with symptoms of dyspnea and mild precordial oppression. The electrocardiograms taken in La Paz were the same as that found $1\frac{1}{2}$ years previously when the patient was symptom-free. At sea level his symptoms have been absent and electrocardiographic changes have not been noted other than those originally found indicative of old healed posterior infarction.

The 3 patients whose cases have been recited have been followed for 3 years, and no other evidence of heart trouble has been found.

SUMMARY

In a survey of 500 normal adults who had no signs or symptoms of heart disease 12 showed electrocardiograms usually considered to be typical of healed myocardial infarction. All of the abnormal electrocardiograms were in people over 35 years of age; 310 of the normal adults in this survey were over 35 years of age. Thus, 3.9 per cent of otherwise normal adults over 35 years of age showed evidence of previous myocardial destruction probably due to coronary artery disease.

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THE TREATMENT OF THE ANEMIAS*

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THE treatment of the anemias is not a difficult matter if one basic principle is followed, namely, to make the diagnosis. Proper treatment of the anemias can only follow the discovery of the underlying etiologic factor. There has been a certain tendency to consider the anemias as a single entity, and to treat them as such. This idea has been fostered to a large extent by the many proprietary agents available which contain many if not all the "so-called" hematinics and known vitamins. It is not at all unusual to have a preparation pass across the physician's desk which contains iron, liver extract, folic acid, B_{12}, copper, pyloric substances, thiamin chloride, nicotinic acid, pyridoxine, vitamin C, and so forth. The use of such preparations is wrong, because it results in needless expense to the patient and frequently interferes with making an accurate diagnosis and properly managing the patient.

It is my purpose to discuss the treatment of the specific anemias by means of a simple classification. All of the known anemias may be classified into three major groups. There are, first, those anemias which are secondary to the deficiency of a factor required for proper formation, maturation, and release of the adult erythrocyte. The second group includes those anemias secondary to a disturbance of the bone marrow factory. The third group includes those anemias secondary to blood loss or blood destruction. Table 1 classifies the specific anemias in the respective categories with indicated treatment in so far as is currently known.

TABLE 1

Classification of Anemias

(Modified from Wintrobe[2])

	TREATMENT
I. Deficiency	
A. Of the erythrocyte maturing factor	
1. Pernicious anemia	Liver, B_{12} or folic acid
2. Sprue, idiopathic steatorrhea	
3. Occasional case of intestinal stricture or resection	
4. Pernicious anemia of pregnancy	
5. Pernicious anemia of infancy	
6. Nutritional macrocytic anemia	
7. *Diphyllobothrium latum* infestation	
8. Rarely, carcinoma of the stomach, and total gastrectomy	
9. Severe liver disease	
B. Of iron	
1. Deficiency in foods containing iron, especially in infants	Iron Correction of cause
2. Inadequate absorption	
a. With achlorhydria	
b. Following gastrectomy	
c. Sprue, idiopathic steatorrhea, etc.	
3. Excessive demand, pregnancy, growth period	
4. Chronic blood loss	
5. Combinations of the above, as with chlorosis or chronic hypochromic anemia of women	
6. Inadequate prenatal storage, usually combined with no. 1	

It is to be noted in the deficiency anemias that one large group is made up of a deficiency of the erythrocyte maturing factor or the so-called antipernicious anemia factor. All of the diseases in this group, including pernicious anemia, sprue, the pernicious anemia of pregnancy, infancy, etc., are all related directly or indirectly by a common deficiency. Indeed, the other anemias with the exception of the first have fre-

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* Presented at the first Midwinter Seminar of the Medical Society of the District of Columbia, February 21, 1952.

TABLE 1—*Continued*

	TREATMENT
II. Bone Marrow Disturbance	
A. Hypothyroidism	Thyroid extract
B. Hypoplastic or aplastic anemia	Removal of causative agent, transfusion, ACTH
C. Myelphthisic anemia due to metastatic cancer, Hodgkin's disease, leukemia, multiple myeloma, myelosclerosis, marble bone disease, etc.	Treatment of underlying disease; transfusion
D. Renal disease, malignancy, chronic infections	Treatment of underlying disease; transfusion
E. Hypersplenism	Splenectomy, ACTH
III. Blood Loss or Destruction	
A. Acute blood loss	Transfusion
B. Chronic blood loss	Treatment of underlying cause
C. Blood destruction	
1. Congenital	
a. Congenital spherocytic anemia	Splenectomy
b. Congenital nonspherocytic anemia	ACTH (?)
c. Sickle cell anemia	Transfusion
d. Cooley's anemia	Transfusion
e. Marchiafava-Micheli syndrome	Transfusion
f. Others	Transfusion
2. Acquired	
a. Due to infections, and chemical, physical, vegetable and animal agents	Treatment of underlying cause, transfusion, splenectomy, ACTH
b. Due to immune body reactions, agglutinins or hemolysins	
c. Symptomatic	
d. Idiopathic	

quently been called pernicious anemia-like disorders. The treatment of this group of anemias is either with refined liver extract, vitamin B_{12}, or folic acid. There is a difference in response of several of these related anemias to the specific agents employed. This is readily brought out in table 2. Pernicious anemia itself will respond best to either vitamin B_{12} or refined liver extract given in adequate dosage. Because of the failure of folic acid to prevent or to cause a remission in the neurologic symptoms of this disease there is no place in the treatment of pernicious anemia for folic acid alone. Nor has it been demonstrated that combined therapy employing folic acid adds anything to the treatment with B_{12} or liver extract alone. Although sprue will respond to either B_{12}, liver or folic acid, it is my belief that the combined therapy of B_{12} or liver and folic acid results in a more adequate remission. Both the pernicious anemia of pregnancy and infancy seem to respond better to folic acid than to either vitamin B_{12} or liver extract. In the atypical megaloblastic anemias occasionally one agent may cause a remission, while another may not, or a combination of these may be necessary.

TABLE 2

Treatment of Megaloblastic Anemias

	FOLIC ACID	VITAMIN B_{12}	REFINED LIVER EXTRACT
Pernicious anemia		1	1
Sprue, celiac disease	Combined B_{12} (or Liver) and Folic Acid		
Pernicious anemia of pregnancy	1	2	2
Megaloblastic anemia of infancy or childhood	1	2	2

In the atypical megaloblastic anemias, occasionally one may cause a remission, while another may not, or a combination of these may be necessary. In sprue, although folic acid or liver extract will cause a remission, I believe that the combined therapy is better.

In regard to the doses which are indicated in the treatment of the pernicious anemialike group of diseases I believe that more than merely adequate doses should be utilized. For example, in the treatment of the patient with pernicious anemia whose red blood cell count is approximately 1,000,000, I would recommend that 30 micrograms of B_{12} or approximately 30 units of liver extract be injected intramuscularly daily until a maximum reticulocyte response has been obtained. Then the dosage may be diminished to every other day until it can be demonstrated that the hematocrit, red blood cell count, and hemoglobin are rising satisfactorily, and then gradually the dose may be decreased to every third day, twice a week, and once a week; and eventually an injection of 30 micrograms of B_{12} or 30 units of liver will suffice when injected once a month. In those diseases in which folic acid is indicated a dosage schedule of from 15 to 30 milligrams by mouth will ordinarily provide a more than adequate response.

The second major group of deficiency anemias is that secondary to the deficiency of iron. That anemia caused by a deficiency of foods containing iron is most commonly seen in infants, particularly when a child is born with inadequate stores because of iron deficiency in the mother. Inadequate absorption may sometimes be seen in patients with achlorhydria, following gastrectomy, or in sprue or other chronic diarrheas. The excessive demand of pregnancy or the growth period during childhood may occasionally result in an iron deficiency anemia. Chronic blood loss will be discussed further, but it is one of the most common causes of anemia seen in the practicing physician's office. It is imperative that the cause for the chronic blood loss be established, because iron therapy alone will not cause an adequate remission, and a very serious underlying disease may be missed. The combination of inadequate absorption, a deficiency in iron-containing food, and monthly blood loss not infrequently results in a chlorotic picture or the picture of chronic hypochromic anemia as seen in the adult woman. In this group of anemias iron therapy, either with the use of ferrous sulfate, ferrous gluconate, ferrous carbonate, or colloidal form is indicated. The usual dose of ferrous sulfate is approximately 15 grains a day in divided doses. I wish to emphasize again the importance of correction of the underlying cause of the iron deficiency when it is known. The great bulk of iron deficiencies seen in the adult is due in large part to chronic blood loss. This point should be emphasized, and a very thorough and careful search should be made for the bleeding point.

The next major classification of the anemias involves bone marrow disturbance. One of the most interesting in this group is that anemia which is seen with hypothyroidism. This anemia will not respond to any of the known hematinics but can be eradicated when the patient is treated with the proper thyroid medication. In hypoplastic or aplastic anemia associated with a diminution or absence of functional bone marrow, whether due to known or unknown causes, transfusion is an important method of treatment. When known, removal of the underlying cause will frequently result in a remission. Supportive therapy, including antibiotics when indicated, is valuable, and in an occasional case ACTH or cortisone will result in the formation of normal bone marrow again. Frequently, however, the prognosis is poor. The myelophthisic anemias secondary to some other disease such as metastatic cancer, Hodgkin's disease, leukemia, etc., likewise carry a poor prognosis. However, palliative therapy, including treatment of the underlying disease, and transfusions will frequently result in adequate remissions varying in length depending on the severity of the underlying disease. Renal disease, neoplasia, and chronic infections may produce a normocytic, normochromic anemia due to a toxic effect on the bone marrow by the constitutional disease. Here again treatment of the underlying disease and transfusion is the treatment of choice. Hypersplenism which may manifest itself by a reduction in red blood cells alone or reduction of any one or all of the peripheral blood elements may occur in any situation in which the spleen is enlarged. Splenomegaly, peripheral cytopenia, and a normal or hyperplastic bone marrow allow the diagnosis for this disorder to be made. Splenectomy is usually the treatment of choice. In those cases in which there is failure of response, ACTH or cortisone may be helpful in obtaining a remission.

The next group of anemias includes those due to blood loss or blood destruction. Obviously the treatment of acute blood loss is immediate transfusion and removal of the underlying cause. I include chronic blood loss again at this time because of its importance in clinical practice. One should not use any therapy except transfusion as indicated until the underlying cause for the bleeding is discovered. In regard to the groups of diseases caused by blood destruction there are two main categories. These include the congenital disorders and those which are acquired. Of the congenital group the spherocytic or familial hemolytic jaundice responds very satisfactorily to splenectomy. When the proper diagnosis has been made, all of the patients with this disorder will respond to surgery. It is true that the underlying cause is not changed, but the patients no longer have hemolysis. A new type of congenital hemolytic anemia is the congenital nonspherocytic form. Only a few of these have been reported, and the therapy which will best handle these cases is not as yet established. Splenectomy seems to do very little for these patients, and the place of ACTH will soon be learned. In regard to the remaining anemias in this group, sickle cell anemia, Cooley's anemia, and the anemia seen in the Marchiafava-Micheli syndrome, the only treatment is transfusion.

There is much work going on in differentiating the various types of hemoglobin seen in the above-mentioned anemias, and perhaps when more is learned about their pathogenesis a more rational method of therapy may be indicated. Included in this group is a new type of hemolytic anemias recently described by Kaplan, Zuelzer and Neel.[1] These authors describe a new type of hemoglobin, determined electrophoretically, which they have named hemoglobin 3. The several new hemolytic syndromes they have introduced result from a combination of this type of hemoglobin and either a normal or sickle cell hemoglobin. The treatment for this group likewise, as far as is presently known, is transfusion alone. As to the acquired hemolytic anemias, whether these be due to known or unknown causes or whether they are associated with underlying disease such as Hodgkin's disease, leukemia, etc., transfusion is an important method of treatment. When known, removal of the underlying cause will frequently result in a remission of these disorders. Splenectomy has been found to be helpful in approximately 50 per cent of the cases. More recently ACTH and cortisone have been used successfully by a number of investigators, and it is my opinion that one of these should be tried before splenectomy is resorted to.

In general, a large portion of the anemias that are commonly seen can be successfully treated when they have been properly diagnosed. Those anemias which are associated with underlying malignant disease obviously can be little helped with any permanency. Again I should like to stress the importance of accurate diagnosis, if accurate and precise treatment is to follow.

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THE USE OF ERGOT DRUGS FOR MIGRAINE*

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A QUARTER of a century has now passed since ergotamine tartrate was first used in the treatment of the migraine attack.[1] The first half of this period (1926–1938) was spent in expanding our clinical knowledge of this agent in this disease. Several as yet incontrovertible points were established as early as 1936,[2] namely, that ergotamine tartrate (and other derivatives of ergot which have since been developed) is effective in approximately 90 per cent of cases; that it is most effective early in the attack; that tolerance, with only 1 reported exception,[3] never develops; and that the alkaloid is less effective in other types of headache and useless in the prevention of migraine attacks. The latter half of this period of time, beginning with 1938 and extending to the present, has been devoted to establishing the mechanism of drug action and increasing the number of agents and methods of administration. We may now consider the chemistry and pharmacology of ergot derivatives as well as indicate methods of administration, contraindications, and toxic effects.

Ergot is a fungus (*Claviceps purpurea*) which grows on rye and other grains. It contains two groups of substances, one of which, the ergot alkaloids, is currently being discussed. The basic nucleus of these alkaloids is lysergic acid (figure 1), an indole derivative. The presence of an asymmetric carbon atom permits derivatives of lysergic acid the property of optic activity. By the addition of ammonia, d-proline, pyruvic acid and various amino acids, a variety of naturally occurring alkaloids have been formed and isolated from ergot (table 1).[4] Twelve naturally occurring alkaloids consisting of 6 pairs of optical isomers have been obtained. The dextro forms are rare, very little soluble, and have lesser biologic activity. Three groups have been established: the ergotamine, ergotoxine, and ergobasine (ergonovine), all of which are levorotatory. Recently Stoll and Hofman[5] in Switzerland discovered that ergotoxine is not an entity but is composed of 3 substances, ergocristine, ergokryptine, and ergocornine. These same investigators discovered that one of the double bonds of lysergic acid can be saturated to give us the dihydro form of the alkaloids. There is, therefore, available for clinical use dihydroergotamine[6] (DHE 45) and 2 other substances as yet in the research stage, dihydro-

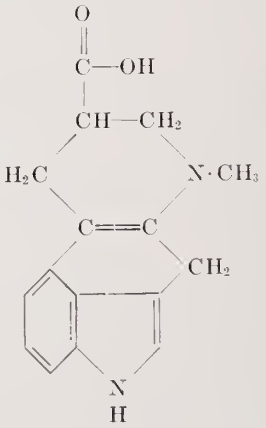

FIG. 1. Structural formula for lysergic acid.

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[*] Presented at the Seventh Annual Congress of the American College of Allergists in Chicago, Illinois, February 12, 1951.

ergocornine (DHO) and the dihydrogenated members of the ergotoxine group, known experimentally as CCK 179. These latter substances are strongly sympatholytic and weakly vasoconstrictive. As such they offer little hope in the treatment of a migraine attack except perhaps in the preventive phase of migraine[7] and in hypertension.[8–10] Ergonovine has been used in migraine[11] but has been abandoned because of its lesser potency as compared to ergotamine.

TABLE 1

Composition of the Natural Alkaloids of Ergot

(Cleavage products of alkaline and acid hydrolysis)

I. Ergotamine group 1. Ergotamine Ergotaminine 2. Ergosine Ergosinine	Lysergic Acid NH$_3$ Pyruvic Acid d-Proline	l - Phenylalanine l-Leucine
II. Ergotoxine group 3. Ergocristine Ergocristinine 4. Ergokryptine Ergokryptinine 5. Ergocornine Ergocorninine	Lysergic acid NH$_3$ Dimethyl-pyruvic acid d-Proline	l - Phenylalanine l-Leucine l-Valine
III. Ergobasine (Ergometrine) Ergobasinine (Ergometrinine)	Lysergic acid	d-2-Aminopropanol

The mechanism of action of ergot in migraine was completely unknown long after its clinical usefulness was established. The critical experiment of Graham and Wolff[12] established with little doubt that the therapeutic action of ergotamine (figure 2) is primarily vasoconstrictive upon the extracranial branches of the external carotid artery. It is clear from the diagram that the intensity of the headache is dependent upon the amplitude of the temporal artery pulsations, and the effect of the drug is to damp the violent excursion of these vessels. The original explanation of drug action was based on the sympatholytic effect of ergotamine. This pharmacologic effect in animals is thus not operable in man, since this sympatholytic (vasodilator) effect is not seen in the doses ordinarily used in migraine. The rise in blood pressure seen with ergotamine administration is a further indication that the effect of the drug is primarily vasoconstrictive.

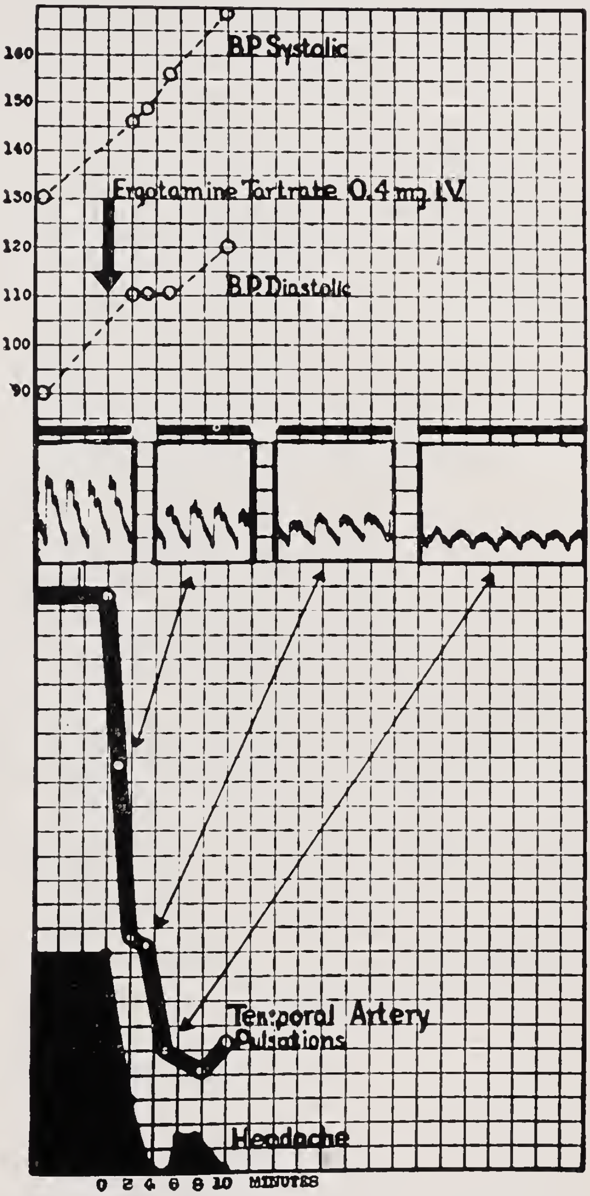

FIG. 2. Action of ergotamine tartrate on temporal artery during migraine attack.

A wide variety of ergot preparations is now available for the treatment of migraine (table 2). The medication may be administered parenterally, orally, and rectally. By injection these agents, ergotamine tartrate, also known as Gynergen, and dihydroergotamine, more commonly known as DHE 45, may be given subcutaneously, intramuscularly, and intravenously in the dosage indicated. Orally our experience with ergotamine had always been somewhat disappointing until the addition of caffeine[13, 14] gave a substance which is better digested and more uniformly effective in smaller dosage; caffeine acts synergistically as a vasoconstrictor. This combination, now known as Cafergot (Cafergone—E.C. 110) is effective in dosages as small as 2 mg. of ergotamine, rarely more than 6 mg. being needed. Extending these observations, we[15] have recently published our experiences with a similar product (EC 112), which can be used per rectum. Because of the ease of self-administration and guaranteed absorption in spite of gastrointestinal upset this agent should become a worthwhile tool in our armamentarium, particularly since it sacrifices none of the potency of parenteral ergotamine. The addition of belladonna alkaloids and increasing the amounts of caffeine seem to offer no additional advantages.

TABLE 2

Use of Ergot in Treatment of Migraine

METHOD OF ADMINISTRATION	MEDICATION	AVERAGE DOSAGE	EQUIVALENT AMOUNT OF ERGOT
Parenteral	A. Gynergen (ergotamine tartrate)	0.5–1.0 c.c.	0.25–0.5 mg.
	B. D.H.E. 45 (dihydroergotamine)	0.5–1.0 c.c.	0.5–1.0 mg.
Oral	A. Gynergen (ergotamine tartrate)	5 mg. stat 2 mg. q̄ 1 hour to relief or total of 11	5–11 mg.
	B. Cafergone—E.C. 110 (ergotamine tartrate, 1.0 mg., and caffeine, 100 mg.)	2 tablets stat 1 tablet q ½ hour to relief or to total of 6	2–6 mg.
Rectal	A. E.C. 112 (ergotamine tartrate, 2.0 mg., and caffeine, 100 mg.)	1–2 suppositories	2–4 mg.
	B. E.C.B. 115 (ergotamine tartrate, 2.0 mg., caffeine, 100 mg., and Bellafoline, .25 mg.)	1–2 suppositories	2–4 mg.
	C. E.C. 222 (ergotamine tartrate, 2.0 mg., and caffeine, 200 mg.)	Under investigation	Under investigation

A word must be said about the frequency of administration of these agents in view of the possibility of toxic effect, to be discussed later. Many patients have used therapeutic doses of ergot daily without suffering untoward effects.

In view of reported cases of toxic effects attendant upon overdosage,[16, 17] even though they occur in less than 0.2 per cent of the cases, patients should be advised to restrict consumption of these agents to once a week unless unusual situations occur.

TABLE 3

Toxic Effects of Ergot

1. Nausea and vomiting
2. Muscle cramps in extremities
3. Paresthesias of fingers and toes*
4. Substernal pressure sensation*
5. Abdominal cramps
6. Prostration and exhaustion

* Reduce dosage and frequency of ergot

The toxic effects of ergot were appreciated by von Storch[18] in 1938 (table 3). Nausea and vomiting are common, as are muscle cramps in extremities. Paresthesias of fingers and toes and substernal pressure sensation are less common but are of such serious import that patients with these complaints should be carefully evaluated. Abdominal cramps and prostration occur occasionally but are less serious. Von Storch likewise recognized disease states in which ergot is ordinarily contraindicated (table 4). Ergot should not be used in the presence of sepsis, peripheral vascular and coronary artery disease, and pregnancy. Since many of the early reports[19] of toxicity occurred in patients with hepatic insufficiency, ergot should not be used in this state. Our recent experiences[16] with toxic effects make us hesitant in using ergot when nutritional deficiency exists or in the presence of hypertensive cardiovascular disease.

TABLE 4

Contraindications to Ergot Therapy

1. Sepsis and infectious states
2. Peripheral vascular disease, e.g., Raynaud's or Buerger's disease, marked arteriosclerosis, venous thrombosis
3. Coronary artery disease
4. Pregnancy
5. Hepatic insufficiency
6. Nutritional deficiency states
7. Hypertensive cardiovascular disease

In summary, it may be said that ergotamine tartrate and its derivatives are most effective agents in the treatment of migraine, rivaling in its specificity the high therapeutic indices of the newer antibiotics. The chemistry and pharmacology of ergot have been considered in some detail. The careful use of the agent in prescribed dosage and in properly diagnosed and evaluated cases should make toxicity an almost unheard of occurrence. Finally, it is well appreciated that ergot has no value in the prevention of migraine attacks and that other methods must be resorted to in order to obtain "cures."

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INCIDENCE OF CANCER IN A GROUP OF WOMEN

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L'ESPERANCE[1] in a summary of 26,126 women examined in a cancer detection clinic reported 400 cancers. Deducting the basal-cell skin lesions, of which there were 43, there is left 357 malignant lesions, of which 279 occurred in the breast and generative tract, 38 in the gastrointestinal system, and 40 in other locations. If these figures are generally correct, physicians who include the breasts, vaginal-pelvic organs, and rectum in routine physical examinations should regularly discover more than 80 per cent of the detectable early cancers in women. The report of Macfarlane, Sturgis and Fetterman[2] brings out the importance of periodic observation in detecting cancer of the cervix. It also illustrates the difficulty of keeping a given group of individuals under continued study. To effect a comparison the medical records of 4,320 women receiving periodic gynecologic examinations during the past 5 years have been studied. The majority are married, with children, and the average age is 38 years. Examinations have been made at 6- to 12-month intervals and include the breasts, abdomen, vaginal bimanual, and digital rectal examination. Positive results and any symptoms that could be possible indications of the presence of cancer have been further studied with ultimate tissue biopsy to diagnose or reasonably exclude malignancy. The statistics may not be exactly correct, since some of the women have left the area after varying periods of time, and others, from time to time, obtain care from private physicians even though they continue membership in the organization. In these 4,320 women there have been discovered 37 cancers as shown in table 1.

CANCER OF THE BREAST

Seven of the 15 breast cancers were found by routine examination and were unsuspected by the patient. Six of these proved early lesions, 1 advanced. Of the 8 cases in which growths were found by the woman herself, 5 were early, 3 advanced. One of the latter had had 2 physical examinations in the preceding 6 months. According to the record there was no note made of the breasts being examined on either occasion, nor could the woman remember the physician doing so. It is surprising to note, in review of medical records, how often no note is made of the breasts during examination of the chest. Physicians should not forget to do this. It certainly is simple enough when the woman is undressed and the breasts already exposed. To do so during a gynecologic examination scarcely adds any time to the examination. The woman removes all her clothes except slip, shoes and stockings. When the attendant places her in the lithotomy position she simply slips off the shoulder straps and places a towel across the breasts. In this position a simple examination with the flat of the hand will usually disclose the majority of breast lumps. Physicians who regularly employ breast examination in such a fashion with increasing experience develop surprising skill in finding small lumps. Two cases of breast cancer are presented be-

TABLE 1

Location

Breast	15
Cervix	8
Corpus	6
Ovary	5
Colon	2
Larynx	1

cause they both present unusual features causing delay in diagnosis.

Case 1. A graduate nurse aged 38 years complained of repeated spontaneous abortions. She requested a specific program of cyclic hormone therapy which she had read about in a medical article, the purpose of which was to prevent another miscarriage. For 3 months she was treated with gonadotropin, estrogen and progesterone. It was then discovered that she had had a lump in her breast for several months and that the lump had grown rapidly after the hormones were given. At operation advanced cancer of the breast was found. Death occurred in less than a year. Further information revealed that she had had a pronounced suicidal tendency for several years.

Case 2. A woman aged 38 years reported with a small, discrete, freely mobile lump just above the nipple. At first she refused to be examined, then with much protesting allowed it to be done. On referral to a surgeon she permitted examination but refused surgery. Fourteen months later she returned. By this time the lump was about 2 cm. in diameter, fixed firmly to adjacent tissues and very suggestive. Now she consented only to local excision of the lump. After it was reported malignant she consented to radical mastectomy and 19 of 22 lymph nodes removed from the axilla were reported positive. During a subsequent course of deep X-ray therapy a hitherto unsuspected suicidal disposition became obvious. At present she has skeletal metastases. It is possible that both of these individuals carried out a suicidal tendency, either subconsciously or deliberately, by delaying until the outlook was poor.

Cancer of the Cervix

Table 2 gives essential data on the 8 cases of cancer of the cervix.

TABLE 2

Age, Stage and Duration of Symptoms*

AGE	STAGE	DURATION OF SYMPTOMS BEFORE DIAGNOSIS
35	iii	11 months
67	iii	Discovered on routine examination
42	i	12 months
33	i	Discovered on routine examination
44	0	2 months
43	0	Discovered on routine examination
33	0	Discovered on routine examination
28	0	Discovered on routine examination

* Schmitz classification with stage 0 representing preinvasive intra-epithelial carcinoma "in situ."

Three of the cases of cancer of the cervix are of sufficient interest to be presented.

Case 3. In 1925 a woman aged 35 years had regular episodes of intermenstrual bleeding for 11 months. Treatments by several physicians failed to stop the bleeding, and she went to a well known surgical clinic on her own initiative. There the diagnosis was made of an extensive stage iii epidermoid carcinoma of the cervix. She was treated with radium and X-rays. She is now 61 years old and in good health. There is no indication of recurrence.

Case 4. In 1942, at the age of 41 years, this woman complained of a profuse, clear, nonirritating vaginal discharge. In a period of 12 months she had 3 vaginal examinations performed by different physicians. On the first 2 examinations the record notes "marked cervicitis," but no biopsy was taken. On the third examination a biopsy was made and tissue was reported epidermoid carcinoma, stage i. She was treated with radium and X-rays and is living and well, free of recurrence.

Case 5. In December, 1951, this woman, an unmarried spinster aged 67 years, reported for her annual physical examination. Menopause had occurred 8 years previously with no vaginal bleeding or discharge since. There were no abnormal findings on the examination, but a few days later she reported a slight stain of vaginal blood. Gynecologic consultation reported that the cervix presented a smooth mucosa externally and that a steady flow of dark brown blood was oozing from the external os. Further study revealed an early stage iii epidermoid carcinoma of the cervix with definite left side parametrial invasion proven by biopsy.

Corpus Cancer

Data of the 6 cases of cancer of the fundus uteri are given in table 3.

TABLE 3

Age, Stage and Duration of Symptoms*

AGE	STAGE	SYMPTOMS	DURATION
54	I	Postmenopausal bleeding	3 weeks
50	I	Intermenstrual bleeding	4 months
40	I	Intermenstrual bleeding	1 month
48	I	Postmenopausal bleeding	5 months
74	IV	Postmenopausal bleeding	2 years
53	IV	Menorrhagia	7 years

* Stage I—limited to endometrial cavity, usually malignant polyp; stage IV—frozen pelvis.

The two cases in stage IV are of sufficient interest to report.

Case 6. A woman, aged 74 years, was brought in by her daughter with the complaint of having found blood stains on her mother's bed linen. The patient had been bleeding for more than 2 years and had concealed it from her family. She was childish, senile, and afraid of doctors. Examination revealed a "frozen pelvis." Curettage obtained grossly suspicious tissue in abundance, reported adenocarcinoma.

Case 7. The patient, aged 53 years, was found on her first examination to have her lower abdomen and pelvis filled with a solid, fixed mass, although she had no symptoms or complaints. In 1941 she had had a radium treatment for menorrhagia without preliminary curettage and without subsequent follow-up. Laparotomy was advised but declined. Several months later a report was received from a surgeon in another city stating that surgery disclosed carcinomatosis, originating in a corpus cancer.

Cancer of the Ovary

The 5 cases of ovarian carcinoma are summarized in table 4.

TABLE 4

Age, Stage and Duration of Symptoms

AGE	SYMPTOM	DURATION	STAGE
52	Abdominal mass	Under 2 months	Advanced
63	Abdominal mass	Under 2 months	Advanced
39	Abdominal mass	Under 2 months	Advanced
39	Abdominal mass	Under 2 months	Advanced
31	None (found on examination)		Encapsulated cystadenocarcinoma

Three cases are presented to illustrate how ovarian cancer can erupt "under our very eyes."

Case 8. At the age of 61 this woman complained of postmenopausal bleeding for several days. At the age of 47 she had had coronary thrombosis. She also gave a history of small uterine fibromyomata which had been kept under periodic observation until an uncomplicated menopause at 56. Examination revealed the uterine corpus enlarged about 5 times normal size, nodular and freely mobile. No adnexal masses could be felt. At curettage grossly normal tissue was obtained which was reported benign proliferative endometrium. Hysterectomy and salpingo-oöphorectomy were advised, but a medical consultant would not consent. There was no further bleeding, and vaginal examination 10 months later revealed no change in findings. A year after the curettage she had a second heart attack. After she had been in the hospital 5 weeks she complained of abdominal distention. Examination now revealed fixed, large abdominal and pelvic masses and ascites. Another curettage produced scanty mucoid material reported as adenocarcinoma. Laparotomy revealed carcinomatosis with primary lesions in both ovaries.

Case 9. At the age of 37 the patient complained of an early and prolonged menstrual period, followed by lower abdominal pain. Examination revealed completely normal pelvic structures and the impression was possible early menopausal irregularity. Her menses resumed a normal cycle, but she continued to have intermittent attacks of lower abdominal pain. Repeated physical examinations were negative. X-ray examinations of the gastrointestinal, biliary and urologic systems were negative. One year later she developed an acute abdominal pain lasting 3 weeks, and accompanied by fever and leukocytosis. The abdomen enlarged rapidly and large pelvic and abdominal fixed masses and fluid were found. Laparotomy revealed carcinomatosis, primary in the ovaries.

Case 10. At the age of 36 the patient reported for a routine physical examination, at which time no abnormalities were found. Six months later a small lump was found in a breast. This was excised by a surgeon and reported benign. Four months after the breast operation she complained of abdominal pain of 3 weeks' duration. General physical and gynecologic examinations failed to reveal any abnormalities. One month later the abdomen became rapidly distended and a large, fixed, lower abdominal mass with ascites was found. Laparotomy revealed carcinomatosis with primary tumors in the ovaries.

Other Sites of Cancer

The two colon lesions occurred in women complaining of recent passage of fresh blood in the stool. One was evident by digital rectal examination. The other was found by barium contrast enema. When resected by a surgeon, both were found to be malignant polyps, without regional node involvement. The remaining cancer, laryngeal, occurred in a woman who always had a husky voice. After an anesthetic for a hysterectomy this hoarseness became worse. The otolaryngologist reported a papule on a vocal cord, from which he took a biopsy.

(*Continued on page 412*)

SURGICAL TREATMENT AND RADIATION THERAPY OF MALIGNANT LESIONS OF THE NOSE, PARANASAL SINUSES, NASOPHARYNX, TONGUE, TONSILS AND HYPOPHARYNX

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The Nose, Paranasal Sinuses and Nasopharynx

TOO much emphasis cannot be laid on the necessity of early diagnosis, and it is of the utmost importance to discover the lesion before metastases occur.

Everyone working in this field has seen highly neoplastic new growths stimulated by irradiation, and they have also observed slow-growing tumors with epithelial pearls and dense fibrous tissue melt away under the same treatment.

Some authors believe the principles of cancer surgery are violated in diseases of the paranasal sinuses because it is impossible to remove the growth through normal tissue.

When X-rays, radium or any radioactive substance is applied to a cancer it must be remembered that its effectiveness is limited to the area which is adequately irradiated. Several factors influence the results of this treatment, i.e., accurate approximation of the radiation beams to the entire cancer area, adequate dosage to destroy the cancer, and the patient's ability to tolerate the injury. All this will depend upon the knowledge, care and experience of the radiotherapeutist.[1]

When radiation is used it should extend well into normal tissue. Radiation within the cavities of the nose, paranasal sinuses and nasopharynx may be carried out by tubes or needles containing radium or gold radon seeds which are placed in these bodies. This requires accurate disposition of the irradiating foci, and proper dose calculation. When a large quantity of tissue has to be irradiated, intracavitary and interstitial radiation may be used alone or as an addition to external radiotherapy.

The radiation dose varies with the radiosensitivity of the cancer to radiotherapy, but recognized authorities recommend surgery as being preferable to radiotherapy if excision is practical in cases of paranasal sinus malignant neoplasia. This surgery can be followed by immediate radiation in appropriate cases.

Since infection may interfere with the tolerance of cancer-destroying radiation, surgical drainage may become necessary when infection is superimposed on neoplasms of the maxillary sinus, and the use of antibiotics and a few small doses of X-rays may be helpful before instituting radiotherapy.

It is well to treat basal-cell epithelioma of the skin of the nose early by roentgen rays or other form of radiation. Excision with skin grafts is often used effectively.[2] This lesion becomes more difficult to control after it has extended to the mucous membrane, cartilage or bone, and excision is preferable to radiation if the circulation of the primary site is poor. Squamous-cell epithelioma requires a slightly higher tumor dose of irradiation than the basal-cell type, and epidermoid epithelioma, cylindroma and other adenocarcinomas of the nasal cavity may be treated by interstitially placed radium needles.[1]

When differentiated squamous-cell cancer invades cartilage or bone, it becomes difficult to control by radiotherapy. Excision or electrocoagulation of the invaded cartilage or bone may at times be preferable to radiotherapy. This may be the sole treatment or may be combined with preoperative or postoperative radiotherapy.[1]

The knowledge of lymph drainage in these areas is essential to the surgeon and the radiotherapeutist in all cases of cancer. It is well to remember that the extension of cancer is in the direction of the lymph flow, and retrograde metastases takes place only after the regional nodes are blocked.

Growths which metastasize more readily, such as lymphosarcoma or lymphoepithelioma, are preferably treated with roentgen rays or radium beams, and roentgen therapy is preferred in transitional epithelioma. Personal preferences, experience, and availability of equipment all determine the type of radiotherapeutic agent used in the individual case.

Although many operative technics have been described for neoplastic diseases of the nose and nasal sinuses, it is essential to have adequate exposure. Since malignant disease in the nasal sinuses cannot be removed through normal tissue, the entire operative cavity should be desiccated with the coagulating current; this is to be followed by the local insertions of radium in order to destroy any remaining malignant cells. This surgical treatment, followed by radiation, is twice as effective as any other type of treatment and should give a 5-year survival rate of 35 per cent.[3]

A number of epidermoid cancers of the maxillary sinus have been arrested for 5 years or longer by radium or roentgen treatment without recourse to surgery in spite of the difficulty of destroying squamous-cell cancer growing in bone. Simple insertion of a special radium tube through the canine fossa has given good results with some. The earlier this is done the higher the percentage of apparent cures. When the orbital wall or its floor is invaded by a neoplasm of a nasal sinus, it is difficult to protect the eye from radiation damage and at the same time destroy the cancer. Intensive irradiation of the eye may cause severe and painful reactions, and hesitancy to include the eye in the radiation may be a factor in failure of the treatment.

It is the extensions of cancer of the maxillary sinus into the pterygomaxillary fossa, ethmoidal region, and brain, as well as metastasis to the retropharyngeal lymph nodes that contribute to the high mortality.

Primary malignant tumors of the ethmoidal region are difficult to separate from cancers of the maxillary sinus in the mesial half of the posterior superior portion. They usually consist of cylindric cells, though epidermoid transitional neoplasms and adenocarcinomas may be encountered. They grow slowly and rarely metastasize but readily extend to the meninges. Wide excision followed by radium therapy has given some good results. Interstitial radium therapy and external radium therapy have also been used.

Frontal sinus cancer as a general rule is unilateral, displaces the eye laterally and downward, and at times may be mistaken for cancer of the ethmoids. Radical surgery followed by postoperative roentgen therapy may be worth trying.

Malignant tumors of the nasopharynx should primarily be attacked by external radiation with roentgen rays or radium beams. If they persist following this treatment, local radium or radon seeds may be placed in a postnasal plug, since it is thought by some that this may help further to take care of the cancer. Various clinics report that results with such treatment are best in lymphosarcomas and lymphoepitheliomas and poor in epitheliomas and cylindromas. Some authorities[4] are not convinced that roentgenotherapy at 800 kilovolts in cancer of the nasopharynx is superior to the use of 200 kilovolts. It has been shown that the prognosis in many of these patients clinically showing metastatic lymph nodes the result of nasopharyngeal cancer is not as bad as one would assume. It is questionable whether prophylactic irradiation of the lymph nodes is of value in these cases, although some believe that it is when limited to lymphosarcomas, epithelioma and undifferentiated epitheliomas.

The Tongue

Lingual carcinoma is prone to metastasize. The lymph drainage from the tongue is so abundant that all parts of the neck should be palpated for enlarged lymph nodes, including the anterior and posterior triangles as well as the internal jugular area. Cancer of the tongue is most common along the lateral border, next at the base, and then at the tip. The under surface is where it is least common. Our first consideration should be prevention. All irritations should be removed, and benign growths should be dealt with surgically. A biopsy of the lesion should be taken before any treatment is instituted.

Recent reports are encouraging as to the value of supervoltage X-ray (800,000 volts) therapy in cancers of the base of the tongue. Therefore, the prognosis may now be better than it has been.[4, 5] Radiation treatment is good unless the cancer infiltrates extensively. When the lesion is small about 75 per cent can be cured. We are aware that epidermoid carcinomas infiltrate the tongue widely and deeply. Lympho-epitheliomas, lymphosarcomas, and many poorly differentiated carcinomas can be destroyed at the primary site with adequate radiation, but many patients are lost because of metastasis to the lungs, bones and abdominal viscera.

Block dissection of the cervical lymph nodes should be done even though the nodes are not palpable at the time surgery is performed on the tongue, which should include a wide margin of normal tissue. Some oncologists are of the opinion that operation is contraindicated if lymph nodes below the omohyoid muscle can be palpated, if the muscle itself can be palpated, or if the cervical nodes along the carotid vessels are firmly attached. Distant metastasis of course eliminates surgery. Patients with carcinoma of the base of the tongue show a high cervical node metastasis rate at the first examination, and often this is bilateral.

The prognosis in cases of malignant neoplasms of the tongue depends upon the type and size of the growth, site, duration, and presence or absence of palpable cervical nodes, and distant metastases. Coöperation is required between the surgeon and the radiologist.

The Tonsils

When the patient with a malignant tumor of a tonsil presents himself to the physician, the lesion has frequently extended beyond the tonsil into the pillars, base of the tongue or farther. Whether the lesion of the tonsil is primary or secondary is of little consequence, since a tonsillectomy is certainly not in order. Theoretically the prognosis is better in a primary tonsillar lesion before extension, in which case surgery may be in order, but most malignant tumors of the tonsil are better treated by irradiation.

The primary lesion, which presents itself as an ulcer on the tonsil, extends readily to the surrounding tissue, and metastasis to the lymph node at the angle of the jaw occurs early, the cancer soon becoming extensive. Even if the lymph node is not palpable, metastasis may already be present. It is often this lymph node enlargement that brings the patient to the physician.

It is a common belief that malignant lesions of the tonsil are second only to nasopharyngeal neoplasms in being mishandled. Often valuable time is lost by the use of chemotherapy when inflammatory conditions exist in association with these tumors. Further, glandular involvement resulting from malignant disease is often treated medically, or the gland is incised, drained or even removed. Probably the most frequent mistake made is performing a tonsillectomy. Carcinomas of the tonsil are usually undifferentiated tumors, aggressively malignant, and almost always radiotherapeutic problems, the exception being the uncommon tumor of salivary gland origin. Surgical dissection of the neck nodes is not desirable, experience showing that the skillful use of radiotherapy gives 30 per cent 5-year cures.[6] Proper dosage and technic are required for the primary site and the cervical node metastasis.

THE HYPOPHARYNX

In this area first consideration is given to the epilaryngeal organs, which include the epiglottis, the arytenoid folds, the arytenoids and the pyriform sinuses, and second consideration concerns the lateral and posterior pharyngeal walls and the postcricoid region. It is well to remember in these hypopharyngeal malignant tumors that a chronic sore throat or dysphagia may indicate the possibility of a growth, and enlarged cervical lymph nodes in the absence of other symptoms may suggest metastasis from a silent lesion in the hypopharynx. Then both indirect and direct laryngeal examinations are in order, with a biopsy of the lesion, since, after all, an unqualified diagnosis of cancer even in advanced cases can be made only by the pathologist.

Cancers in these sites were formerly considered as hopeless. Since these parts can usually be well seen, particular attention should be given to them. Orton[7] found that 34 per cent of the patients he saw at his first examination were inoperable. Here cancer is insidious in its onset, and spreads at a very early stage. Much can be done if the proper surgical and radiotherapeutic treatments are instituted, and to do this the type of malignancy, location, the extent of the growth, and the presence or absence of metastasis will determine what lines of treatment are best to pursue. With these facts in mind it is well to sum up each site separately:

The Epiglottis. When a malignant lesion occurs above the hyo-epiglottic ligament on the epiglottis, the main structure of the larynx is left intact by operation. If the lesion occurs below this area, it is best to remove the epiglottis, the larynx, and the preëpiglottic space with the hyoid bone, since a malignant neoplasm in this region causes early invasion. Lenz[8] reports 32 per cent carcinomas of the epiglottis were free of the disease after 5 years when treated by irradiation.

The Aryepiglottic Folds. Here extensive operative work will be required when malignancy presents itself, since cancer spreads early to surrounding tissues. The same applies to the arytenoid involvement.

The Pyriform Sinus. Tumor here usually involves the outer and the inner walls, and since it is closely connected with the larynx, invasion of the larynx has usually taken place when the patient consults the physician. If such is the case radical surgical efforts are required.

Lateral and Posterior Pharyngeal Wall Cancers. These require lateral pharyngotomy, followed later by postoperative radiation therapy in selected cases.

Postcricoid Area. Since cancer here has generally invaded the lateral pharyngeal wall or extended down the esophagus when the patient first presents himself, extensive radical surgery would be required.

The prognosis of cancer of these areas may be summed up in the order listed from the epiglottis as the least serious to the postcricoid as the most serious.

The epilaryngeal cancers are nearly always epidermoid lesions, less well differentiated than those of the oral cavity or endolarynx. Those of the upper hypopharynx are nearly always accompanied by bulky cervical metastasis, often bilateral, but they seem to respond to radiation therapy. The prognosis for radiation therapy in cancer of the postcricoid region, lateral hypopharyngeal wall, and pyriform sinus areas is not good. Lesions on the posterior hypopharyngeal wall, which are quite rare, carry a fairly good prognosis with radiation treatment, because the lesion does not invade vital parts. At present the curability of cancer of the hypopharynx is not an optimistic one from the radiotherapeutist's point of view, but encouraging results are being obtained in the use of supervoltage X-rays, and with their continued use more optimism may be hoped for.

If the neoplasm is operable, the surgeon ought to handle the case from the start, but coöperative effort between the surgeon and radiotherapeutist is necessary.

SUMMARY

Radium and roentgenotherapy play an important part in the treatment of malignant growths of the nose, paranasal sinuses and nasopharynx. Surgical removal of malignant tumors of the paranasal sinuses with or without postoperative irradiation is the method of choice in selected cases. Best results naturally occur when treatment is instituted early, while the growth is accessible, limited in extent, has not metastasized, and has not invaded cartilage or bone. Radiotherapy has been successful in very radiosensitive lymphosarcomas and lympho-epitheliomas, even after the tumor has become locally extensive and has invaded cartilage or bone. Malignant lesions of the nasopharynx are best treated by irradiation. The outcome of radiotherapy is influenced by the knowledge, experience, and care of the radiotherapeutist administering the treatment. The choice of surgery, radiotherapy or both in an individual case of malignant disease in the nose, paranasal sinuses or nasopharynx can best be made by a team consisting of a rhinologist, pathologist and radiotherapist.

Radium and roentgenotherapy play an important part in the treatment of malignant lesions of the tongue, tonsils and hypopharynx. Surgery is the first line of attack on the metastatic lymph-node involvement from oral lingual carcinoma, and block dissection of the cervical lymph nodes should be done at the time surgery is performed on the tongue. When lesions of the tongue are small, radiation treatment alone may prove satisfactory. Benefits of supervoltage X-ray therapy have shown encouraging results in treating cancers at the base of the tongue. Coöperation is required between the surgeon and the radiologist.

Malignant neoplasms of the tonsil, whether primary or secondary, are best treated by the radiotherapeutist.

Much can be done if the proper surgical and radiotherapeutic treatments are instituted in malignant lesions of the hypopharynx. The prognosis in cancer of the hypopharynx becomes more serious as one passes from the epiglottis to the postcricoid region. If the hypopharyngeal lesion is operable the surgeon should handle the case from the start, but coöperative effort between the surgeon and the radiotherapeutist is necessary.

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President's Page

THANK YOU, FRANK COSTENBADER

One of the privileges of the President of your Society is to talk to you each month through the medium of the President's Page. That privilege is not unalloyed, since it requires time and thought to prepare the message, and in a way it may be an imposition to force one man's thoughts upon others. In regard to the latter, it is not a requirement of membership in our Society to read this page. However, I think I can say without fear of contradiction that the twelve messages of your recent President, Frank Costenbader, have been splendidly written and well worth reading. In my opinion, there is only one thing wrong with them. They were so good and covered such a wide range of subject matter that I, your new President, am left with "scant pickings."

Now, the President's Page was but a small part of Frank's efforts. He thought much and he worked long hours for the Society. I think it is safe to estimate that he gave at least a third of his time to the Society, much to the disadvantage of his family and his practice. His counsel was always erudite, his deliberations seasoned with kindness, and his knowledge of the problems facing medicine and our Society profound. Please, don't think this is an obituary. Frank is still with us, and "all in one piece." We can still count on him to help with any "tough job."

I would like to pay tribute at this time to others also. The members of your Executive Board—and, of course, Ted Wiprud, as usual—have done a Trojan job (and that means a lot) for you and Washington medicine. They work hard for the Society. I know, because I was on the Board, not only many years ago, but during the past year as President-elect. And then—something you probably never think of—your committees have worked diligently, some more than others. Let me mention particularly the Grievance Committee, the Board of Censors, and the Program Committee. This selection does not minimize the work of other committees, many of which also worked long hours for us. And last, but not least, grateful acknowledgment should be made of the splendid job done, day in and day out, by our office force and the girls of the MEDICAL BUREAU. I sincerely hope—yes, I know—that in the year just starting, all of our officers, committees and staff can be depended on to continue the fine work that has been done under the aegis of retiring President Costenbader during 1951–52.

Wallace M. Yater

WALLACE MASON YATER, M.D., F.A.C.P.

President, The Medical Society of the District of Columbia, 1952–1953

CAT.

Editorials

WALLACE MASON YATER, M.D., F.A.C.P.

Although Dr. Wallace Mason Yater, 86th President of the Medical Society of the District of Columbia, is not a native Washingtonian, he comes very close to it. He arrived on the local scene when he was two years of age.

No other physician in the Nation's Capital is better known nationally than Dr. Yater. This was underscored by physicians in the armed forces during World War II who reported that whenever Washington, D. C. was referred to in a group of medical officers, the name of Dr. Yater was inevitably mentioned. They knew him, as most doctors do, as an outstanding medical educator, lecturer, and an unusually successful author of standard textbooks in medicine.

Born in Canton, St. Lawrence County, New York, September 26, 1895, the son of Charles Baldwin and Stella Frances (Wallace) Yater, he received his early education in Washington, D. C. He graduated with honors from Eastern High School, serving as President and Valedictorian of his class. During his senior year he was Colonel of the Washington High School Cadets, and later he held the position of Military Instructor. During World War I he was in the S.A.T.C as acting First Sergeant, and upon graduation from medical school he was commissioned First Lieutenant, Medical, in the Officers Reserve Corps of the Army.

Dr. Yater attended George Washington University, where he received his Bachelor of Arts degree *cum laude* in 1917. His medical degree was obtained at Georgetown University School of Medicine in 1921. Internships were served at Garfield Memorial and Georgetown University Hospitals.

His career as an educator began shortly thereafter when he was appointed Instructor in Surgical Anatomy at Georgetown University School of Medicine. In the next three years he was successively Instructor in Physical Diagnosis and Professor in Physical Diagnosis. Later he enrolled at the University of Minnesota, where he received his degree of Master of Science in Medicine in 1928 after serving for three years as a Fellow in Medicine at the Mayo Clinic.

From 1929 to 1930 he was Associate Professor of Medicine at Georgetown University and in 1930 he became Professor and Director of the Department of Medicine, a position he held until October, 1945. He was also Head of the Department of Medicine at Georgetown University Hospital and Gallinger Municipal Hospital from 1932 to 1945.

After twenty-one years' association with Georgetown University School of Medicine, Dr. Yater resigned from the faculty in September, 1945. He had long thought of organizing a clinic, which became a reality in the spring of 1947 when the Yater Clinic was established at 1801 K Street, N.W., Washington. Dr. Yater, its first and only Director, gathered about him a number of excellently trained physicians in various specialties. The Clinic has flourished under his able leadership and is now one of the most successful private group clinics in the country.

Dr. Yater is a member of the Editorial Board of *Diabetes;* a member of the Advisory Board of *GP*, the publication of the American Academy of General Practice; a member of the Board of Trustees of the American Association of Medical Clinics; a Regent of the American College

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

of Physicians and a member of its Committee on Fellowships and Awards; and Associate Editor of *Circulation*. His committee memberships include the chairmanship of the Advisory Committee of Cardiovascular Registry of the Armed Forces Institute of Pathology and the Medical Advisory Committee to the Traffic Director of the District of Columbia. He is also a member of the Medical Advisory Committee to the Civil Defense Organization of D. C.

Some of his past assignments have been membership on the Subcommittee on Cardiovascular Diseases of the Committee on Medicine of the National Research Council; Chairman of the Section on Experimental Medicine and Therapeutics of the American Medical Association; and Chairman of the Section for the Study of the Peripheral Circulation of the American Heart Association. He is a former Director of the American Heart Association; former Civilian Consultant to the Medical Department of the Army-at-large; former Governor for the District of Columbia of the American College of Physicians; and founder and first President of the American Association of Medical Clinics.

Dr. Yater's present medical organization memberships include the American Society for Clinical Investigation, the American Medical Association, Southern Medical Association, the American Heart Association, and the Washington Academy of Medicine. He is also a Diplomate of the American Board of Internal Medicine and a member of Sigma Xi fraternity.

Dr. Yater has held innumerable positions in the Medical Society of the District of Columbia, serving on most of its important committees, not only as a member but as chairman. He has been Editor of the Society's journal, MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA, since its establishment in 1932.

He has published two books, "Symptom Diagnosis" and "Fundamentals of Internal Medicine," and 160 scientific articles in various medical journals.

Among the many honors which have come to him is the Award of Honor for Scientific Achievement on March 20, 1948 by the Georgetown Clinical Society. He was the Kober Lecturer in 1938 and a Mayo Foundation Lecturer in 1941. In view of Dr. Yater's activities in editing and writing it is of interest to recall that his father at the age of thirteen owned, published and edited a country newspaper in Missouri.

Dr. Yater is so well known to physicians in Washington that it is hardly necessar yto say anything about him personally. He is truly a doctor's doctor, being recognized as one of the country's leading authorities in his specialty, internal medicine. Washington physicians look upon him not only as one of the best qualified physicians in his field but as a man dedicated to his profession. By nature he possesses an insatiable curiosity, which is the mark of the true scientist. This perhaps explains his youthful enthusiasm for his work.

Despite the seriousness with which he takes his profession, he has his lighter moments. He is then the best of companions. In recent years he has acquired a cabin cruiser which he has found most relaxing. He enjoys nothing better than to spend the weekend aboard with his family and friends, stopping whenever the spirit prompts to rest or to enjoy a meal. He returns to his heavy responsibilities with renewed vigor.

Among his social affiliations are the Chevy Chase Club and the Corinthian Yacht Club.

Dr. Yater married Ruth Millicent Becker on December 22, 1932. They have four children, Millicent Wallace, Stephanie Mason, Wallace Mason, Jr. and Camille Frances. The Yaters reside at 4907 Indian Lane, N.W., Washington.

Our members may well be proud of their President in 1952–53. As has already been emphasized, he is a medical figure of national importance. Equally important, his long experience in organization work, his unquestioned courage, and his integrity qualify him especially for the highest office within the gift of the Society.

T.W.

PUBLIC HEALTH SERVICE CLINICAL CENTER

No one who has driven north through Bethesda on Wisconsin Avenue can have failed to see the very large red brick structure rising for 14 stories above the cluster of smaller buildings of the National Institutes of Health. This is the new hospital, called the Clinical Center. Its purposes and the policies of the Institutes were described by Dr. Norman Topping at the general session of the recent meeting in Chicago of the American Medical Association. Dr. Topping, Assistant Surgeon General, is Associate Director of the National Institutes of Health.

The Clinical Center, now nearing completion, is a laboratory-hospital building which will enable extension of the laboratory research heretofore conducted in the Institutes into areas of clinical investigation, permitting laboratory investigators and clinicians to work together in close physical and intellectual proximity.

The 500 beds of the hospital are to be allocated among the several Institutes about as follows: National Institute of Arthritis and Metabolic Diseases, 78 beds; National Heart Institute, 104 beds; National Cancer Institute, 126 beds; National Institute of Mental Health, 98 beds; National Institute of Neurological Diseases and Blindness, 42 beds; and National Microbiological Institute, 52 beds. No beds will be required by the National Institute of Dental Research.

A follow-up department will handle returning patients and provide facilities for study of normal controls and ambulatory patients. This, however, is not an outpatient department in the usual sense of the term. There is no intention to engage in the practice of medicine as such. Under special circumstances, at the request of physicians in the community, the full-time physicians of the staff may, at their discretion, see outside patients in consultation. They cannot, however, accept fees for such services.

The average teaching and research hospital devotes at least twice as much space to patient care as to research. This ratio is reversed in the Clinical Center, where emphasis, as in the laboratories of the Institutes, will be placed on basic as contrasted with applied research.

The selection of research problems is to be left to the clinical investigator. Just as in the past, the acceptance or selection of problems, the design of the investigation, and the methods to be employed will be the prerogatives of the laboratory scientist. When patients are involved, however, their welfare and comfort will receive first consideration. Obviously, they must be given medical care of very high quality to retain their fullest possible coöperation in the studies undertaken.

The professional staff will be composed mainly of physicians who possess not only talent for research but also high-grade clinical ability. The investigators will all be full-time members of one or another of the Institutes, although a few positions will be filled primarily to provide professional care in areas that otherwise would not be covered.

Likewise recognized is the need for appointment to the staff of a certain number of consultants who for the most part will be physicians and surgeons with special skills or experience not represented by the permanent staff of the Center. They presumably will be members of the faculties of medical schools. It is probable that a panel of such consultants will be appointed with the assistance of the deans of their respective institutions.

Patients are not to pay. The philosophy and intent of Congress was that the study here is to be in the Nation's interest rather than for the benefit of individuals. However, benefit to individuals will necessarily accrue, and if any study patient on his own initiative desires to express appreciation for the service he receives, he will be encouraged to make a gift in cash or kind to the Treasury.

The selection of patients is to be left to the investigator and will be on the basis of the patient's potential value to one or another of the studies contemplated. Except in emergencies, such as victims of an automobile accident in the neighborhood, patients will be admitted only upon appropriate referral after arrangements have been negotiated with accredited physicians or hospitals, clinics, and similar institutions.

Full reports on patients will go at suitable intervals to the referring physician or institution, and later receipt of progress reports from them will be encouraged. Referring physicians will be welcomed on observational visits to the Center, and conferences will be arranged between them and appropriate staff members. By these means the educational advantages of the Center, which inevitably accompany research, will be extended broadly in the interest of the profession.

Staff physicians are being recruited now throughout the country and, despite the relatively low Federal salary scale, the prospects for concentrated research, the atmosphere of scientific freedom, and the facilities available at the National Institutes of Health are making it possible to assemble investigators of outstanding ability.

This is to be a National rather than a Federal resource, in other words, a two-way street. While non-Federal institutions will lose good men to this new Center, they in turn will receive good men from the Center. This is as it should be and has been in the past. One recalls among other instances that McCoy left the National Institutes of Health to become Dean at Louisiana State University Medical School; Rosenau became Professor of Preventive Medicine at Harvard; Maxcy went to the professorship of epidemiology at Johns Hopkins; Victor Heiser to the Rockefeller Foundation; Mansfield Clark to Professor of Chemistry at Hopkins; and Dyer to Emory's Winship Clinic.

The hospital residencies, or, as they may be called, the clinical fellowships of the Center, will go to young physicians who by natural endowment can be expected to profit most from the training they receive and in turn contribute most to research. The requirements for certification of the several Specialty Boards can be met, it is believed, in most cases either in the Center alone, or, where more didactic instruction is required, with neighboring medical schools.

Close coöperation is intended with the universities in Washington, Maryland and Virginia. A conference of the deans of their schools of medicine was held not long ago, and periodic consultations are in contemplation with them and with the officers of the District and neighboring medical societies in an effort to develop procedure which will be helpful to the schools and the profession as well as to the Center.

In general, the concept is to bring together ample physical facilities and varied research skills. The ultimate purpose is to help provide the practicing physicians of this country with continuously improving methods for alleviating suffering and prolonging useful years of human life.

Russell M. Wilder, M.D.
Director, National Institute of
Arthritis and Metabolic Diseases

ANYONE CAN HAVE A VISITING NURSE

Doctors! Do you really know what the Visiting Nurse's role is in the community?

The Instructive Visiting Nurse Society is a voluntary, nonprofit organization comprised of 40 field nurses, all graduate, registered nurses with added preparation in public health, who provide part-time nursing care in homes. This care is available to everybody whether they live in a fashionable apartment or in the shabbiest alley. The charges are $2.25 per visit for an hour or less, with a charge of 50 cents for each additional 15 minutes. For those unable to pay the full cost the charges are adjusted to income. The IVNS also does a great deal of free work for those unable to pay anything. This free service now averages about 75 per cent of total service rendered. The cost per visit is based on a yearly analysis of expenses incurred the preceding year in giving nursing care in the home.

Nursing policies have been carefully worked out by IVNS throughout the 51 years of its existence in Washington. Physician's orders are followed carefully; it is expected that a private or clinic physician be in charge of every case on the register. In addition to giving home nursing care the Visiting Nurse teaches members of the family how to take care of the patient between visits. This care includes the usual nursing procedures, the redressing of surgical wounds, giving hypodermics, and teaching the patient how to give his own insulin. A mother is taught how to take care of her baby when she returns from the hospital, and young parents are assisted in making the many necessary adjustments for family living.

As the only organized visiting nurse group in Washington, IVNS wants to be of service to those who need it most. It has become as much a part of the modern health structure as the hospitals, clinics and the city health department, all serving under the leadership of physicians.

John Minor, M.D.
Chairman, Medical Advisory Board,
Instructive Visiting Nurse Society

TREATMENT OF HYPERTENSION

With the medical literature filled with papers propounding the effects of a variety of hypotensive agents, and the advertising of drug houses trying to outdo their competitors with claims of "specificity," "physiologic in action," "lack of toxicity," etc., we are afraid the practitioner is left by the wayside. Two dangerous reactions are inevitable. One, "if these drugs are effective in severe hypertension, all my patients with moderate or mild hypertension will surely benefit." A second and perhaps more common reaction is, "I have treated hypertension with barbiturates and/or bed rest for years with uniformly good results. Why should I change now?"

Only those patients whose diastolic blood pressures are persistently over 120 mm. Hg should receive so-called "specific" hypotensive therapy. A casual reading of blood pressure levels under the psychic stress and apprehension associated with a "medical check-up" may not reflect the usual level of pressure in many patients. Serious prognosis is indicated only when there are sustained high levels even at rest in the home or hospital or when there is cardiac enlargement, nocturia or vascular changes in the retina. This, then, is a comparatively small number of hypertensive patients—well under 10 per cent.

Our reasons for taking this stand are several. No good study of a large series of cases with a long-term follow-up has proved that any form of hypotensive therapy has increased the longevity of patients with diastolic pressures under 120 mm. Hg or with labile pressures. Also, there is no question that if a simple form of hypotensive therapy existed—if one could take a pill once or twice a day for a week, or an injection daily or even twice a day for several months—every patient whose arterial blood pressure was over 140/90 mm. Hg should be treated. In this way we could prevent the development of severe hypertension and its complications, cerebral apoplexy, uremia, and heart failure.

No such simple form of therapy exists. Of the variety of hypotensive drugs employed, purified oral Veratrum and parenteral hexamethonium hold the most promise. The high incidence of vomiting and the need for precise dosage schedules make Veratrum therapy difficult for patient and physician alike. Also, the postural hypotension with concomitant tachycardia and the constipating effect of hexamethonium make this a hazardous drug in the hands of the inexperienced. An extremely wide range of sensitivity of different patients to both Veratrum and hexamethonium necessitates careful adjustment and individualization of dosages in order to induce a significant hypotensive response on the one hand and avoid undesirable reactions on the other. These disadvantages seem to mitigate against the use of such potent drugs in the treatment of more benign forms of hypertension, in which the prognosis usually is good even without therapy. Such cases usually can be managed satisfactorily by adjustment of their pace of living, mild sedation and symptomatic therapy.

Though patients with diastolic pressures under 120 mm. Hg usually will not benefit from "specific" hypotensive measures, patients whose diastolic pressures are persistently over 120 mm. Hg even at rest or who show rapid organic deterioration in the heart, kidneys or ocular fundi must be given the benefit of hypotensive therapy. The barbiturates or any other form of sedation have little if any therapeutic value in fixed severe hypertension. Both Veratrum and hexamethonium when carefully regulated seem to be effective in prolonging the lives of some of these patients.

Of the two agents, Veratrum is the safer, since no deaths have been reported following oral use of the drug, but hexamethonium by subcutaneous injection generally is more effective. Unless therapy is urgent it seems wiser to try Veratrum first. However, neither drug should be used without obtaining first a thorough knowledge of dosage and of reactions and their management, since successful results depend on fine adjustments, just as in the administration of insulin to a diabetic.

Frank A. Finnerty, Jr., M.D.
Edward D. Freis, M.D.

PROCEEDINGS OF ANNUAL MEETING OF MEDICAL SERVICE

The Fourth Annual Meeting of Medical Service of the District of Columbia was held in the Medical Society's auditorium, April 30, 1952. The following reports presented by the President, Dr. Charles Stanley White, who presided at the meeting; George McGovern, Manager of Medical Service; and Dr. Leo B. Gaffney, Chairman of the Committee on Physicians' Services, should be of interest to readers of the Medical Annals.

Report of the President

Since the inauguration of Medical Service of the District of Columbia, an annual report has been submitted by the President, and I herewith submit mine. It embodies a summary of the outstanding activities and the possible problems ahead with such comments as may seem appropriate. In no sense does it represent opinions of anyone but the author, who assumes full responsibility for the views expressed.

It was apparent from the first that the Board of Trustees would face vexatious questions, solvable and insolvable, but it would face them with due regard to the interest of the public and the physicians. From the change in trends in medical relationships, nationally and locally, situations arose that required clarification, but for which there were few or no concrete precedents. We were working in a comparatively virgin field of medical service, and the experience of similar organizations did not furnish a stable basis for critical decisions. The increased cost of living, the rising scale of wages in some groups and fixed wages in other groups, the increasing number of old persons, and the accelerated expense to which the physician was subjected, were a few of the items thrown into a quandary which could not be dismissed with the stroke of a pen.

We have had liberal guidance through the Blue Cross and Blue Shield Plans in other cities, and I take this opportunity to express my admiration for those pioneers who finally established those Plans on a national scale. There seems to be a popular fallacy that a physician cannot be both a good doctor and a good businessman. The success of the Blue Shield Plans refutes any such conception.

Our local Plan is a comparatively young one, and we have learned much in our brief experience. An organization which collects $3,039,000 annually for distribution and operation, has over 335,000 subscribers, and 1,466 participating and coöperating physicians, cannot be considered small business. It deals not only with finances but, more important and more difficult, with services, which adds to the complexity of its administration. One of our major problems was that of repaying the Participating Physicians the sum of $396,000 which had been withheld from fees during the preceding year, due to insufficient funds.

In order to preserve the solvency of Medical Service, subscribers had been subjected to an increased rate in October, 1950, and it was concluded by your Board of Trustees that a further increase in rates would be necessary if Medical Service attempted to increase fees to physicians or otherwise expand its program. It was believed that an increased rate would be accepted by the public if it were tied in with the rate increase which Group Hospitalization was contemplating. It was necessary for the Board to act promptly if it were to act jointly, and it is my humble judgment that the action was forthright and proper in view of the circumstances. The increased rate permitted wider coverage and elevation of the income ceilings for the subscribers and increased fees an average of 20 per cent to the Participating Physicians.

While the establishment and development of the new program has been the Board's principal activity during the past year, there have been a number of other matters to which the Board has given its time and attention; and so that you may be informed regarding all phases of our work, I shall endeavor to review the more important actions briefly. During the past year your Board of Trustees:

1. Expanded the Physicians' Services Committee from three members to a total of six, to provide better representation to the fields of medicine for which claims are most frequently reviewed.

2. Authorized notice to be sent to non-Participating Physicians outside the Washington area when payment is made directly to the subscriber for services rendered by such physicians.

3. Authorized participation of Medical Service in Medical Indemnity of America, Inc., a national insurance agency sponsored by and under the control of Blue Shield Plans, which was created for the purpose of writing uniform contracts on a Nationwide basis.

4. Established an Executive Committee of five members to act for the Board between meetings of the Board. The Committee has no authority to amend the By-laws or to act for the Board in policy matters.

5. Authorized an increase in rates to subscribers, fees to physicians, and subscriber-income ceilings.

6. Authorized benefits for a limited number of surgical procedures rendered in the home or office.

7. Authorized repayment in full of the $396,000 withheld from physicians during the period of proration.

8. Authorized the adoption of an expanded Schedule of Fees, the nomenclature of which was based upon recommendations made by the AMA and the Blue Shield Commission.

9. Revised the subscriber's contract to make provision for the new program and eliminate discrepancies which had been demonstrated in the old contract.

10. Reviewed and acted upon certain proposals and recommendations made by Participating Physicians at a special meeting. A report on the Board's action in this respect will be given later in the program.

In the near future a committee should undertake the study of the Constitution and By-laws with the object of broadening its scope. It lacks some essentials to facilitate the work of the Board of Trustees.

As you may have gathered, your Board of Trustees has been very active during the past year, and I think it is worthwhile to note that these gentlemen are serving Medical Service diligently and well. Their interests are the same as yours. They devote many hours and much thought to the planning of Medical Service, often at considerable personal sacrifice. The members of the Board have many responsibilities, both public and professional, in the conduct of community affairs, and I think it is noteworthy that they have managed to give so much of their time and attention to the affairs of this Plan without remuneration of any kind.

In conclusion, I wish to state that the record of Medical Service during the past four years reflects the quality of leadership that has been developed in and through your Board of Trustees. The Plan has weathered the rough going of the early stages to emerge as the 17th largest Blue Shield Plan. Your officers and trustees have no apologies to offer for the Plan's record, particularly its record during the past year. Most of the major problems that confronted us twelve months ago have been solved for the immediate future at least. Financially, the Plan is in better condition than it has ever been. We are operating on a sound basis and enjoying steady growth. The outlook is encouraging and I believe it will continue to be so if we, as Participating Physicians, keep clearly before us our responsibilities to the Plan and the people it serves. You and you only have the power to preserve the freedom and confidence our profession cherishes.

I wish to take this opportunity to thank the Board of Directors, the approximately fifty members who served on the various committees, and Dr. Gray, Mr. Rawlings and Mr. McGovern, one and all, for valuable and loyal support through a trying year.

REPORT OF THE ADMINISTRATOR

It has occurred to me that many of you might like to have a better understanding of the way Medical Service covers the cost of its operations, and how that cost compares with other Blue Shield Plans.

As you know, Group Hospitalization, Inc. has been entrusted with the job of administering Medical Service, and many of the functions carried on by Group Hospitalization in the conduct of its own business were adapted to a joint operation with Medical Service. Thus, an applicant may receive a brochure advertising both Plans, his application can be checked to show his desire to enroll in both Plans, his payment is submitted to cover the cost of both Plans, and his bill for the following month will be in the amount necessary to cover the cost of both Plans. Both Group Hospitalization and Medical Service benefit by this arrangement, since it permits sharing expenses which, in many cases, would be duplicated under independent operations. Expenses are shared in proportion to the number of subscribers enrolled in each Plan, with Medical Service at the present time paying about 39 per cent of the cost of operating both Plans.

Operation expense, however, cannot be minimized. It must be remembered that we are involved in the sale of contracts, the collection of accounts, and the payment of claims for 335,000 participants in a Plan which now ranks seventeenth in size among 78 Blue Shield Plans.

While our Sales Department established 396 new groups in 1951, accounting for 6,091 subscribers, the backbone of our enrollment stability lies with the groups which were in existence before 1951. These groups require constant attention to maintain enrollment at a level that will insure a reasonable spread of risk among the employees of any individual group. A total of 68,902 new subscribers were enrolled in previously established groups during 1951. Our sales force has done a tremendous job in this respect and, despite increasing competition from other sources, has maintained a high level of enrollment on an over-all basis.

With regard to the collection of accounts, Medical Service is faced with one of the most complex problems of all Blue Shield Plans. Most of our subscribers are enrolled through Government groups in which payroll deduction is not permitted. Under the circumstances, collections are made by individual collectors throughout various Government agencies and submitted to the Plan for crediting. As you can well imagine, with collectors from 4,000 groups going from person to person collecting cash to be reconciled with a listing on an invoice, we are plagued with many discrepancies which would not occur under a system permitting payments to be deducted from the subscriber's check and submitted through an accounting office. Despite these problems, collection of these accounts continues on a regular scheduled basis. Payments are received in our office, audited, credited to the subscriber's account, and new bills are distributed for the ensuing month, all within a period of 10 days. It's a complex operation, performed with dispatch and with care.

The payment of claims also presents an unusual problem, in that our Plan is one of the very few which provides for payment to as many as 4 different physicians for the same case. During 1951, claims for 29,000 surgical and obstetrical cases were received and, in addition to processing these claims for payment, there were an additional 42,000 claims for ancillary services to be correlated with the surgical or obstetrical case before final disposition. Our Claims Department has worked energetically to dispose of more than 70,000 claims promptly and with a minimum of error. That type of service is what we expect to continue to provide and to improve in the future.

It is axiomatic that any reduction in operating expense provides more money to be paid to physicians in fees and for the establishment of reserves. I think it significant that, since Medical Service began operations, our operating expense has been constantly reduced. Medical Service had an operating expense amounting to 24 per cent of income in 1948, 16 per cent in 1949, 14.5 per cent in 1950, and 11.9 per cent in 1951. Despite the complexity of our operations and the unusual expense connected with the establishment of a new program, the operating costs of Medical Service amounted to 10.5 per cent of income for the first quarter of 1952. The latest figures for Blue Shield Plans in general show an average operating expense amounting to 12.4 per cent of income.

The support of the medical profession, the directives and advice which this Board and its various committees have provided, and the precedent and machinery established by Group Hospitalization have resulted in a program which has been spontaneously accepted by the people of our community. Without this outstanding example of coöperation in rendering an important service, the hundreds of thousands who are enrolled in Medical Service would, no doubt, be looking elsewhere for some means of medical security. We are glad it is not necessary for them to do so.

While we may look upon our administrative record with pride, I feel that you, the physicians who have made Medical Service a powerful agency for the protection of our people, have even more reason to be proud of your achievements and the unselfish contributions made to the planning and operation of Medical Service by those physicians who have devoted their time and energy to the Plan's affairs.

REPORT OF COMMITTEE ON PHYSICIANS' SERVICES

There is no room for complacency in a program such as ours. If we sit back and say everybody is a good fellow, and there are no abuses, and there is no need for concern or vigilance on the part of those who are interested in the success of Medical Service, we stand a good chance of getting our name in *Time* magazine or some other national publication, as did the Blue Shield Plan in the state of California, which was reported as paying their doctors more than a million dollars a year by raising the category of their work (e.g., charging for a cataract operation instead of merely draining a sty), and by submitting claims for imaginary X-ray and laboratory tests, and for operations which were not performed. Let's not say, "It can't happen here."

As you probably know, the Committee on Physicians' Services was established under the By-laws of Medical Service to protect the interest of the subscribers and physicians, and one of the Committee's major concerns is to see that the record of Medical Service is kept clean and free of the abuses reported in California. The Committee reviews and approves the payment of claims which are not of a routine nature, and it is expected to review and adjudicate complaints involving patients and physicians. The Committee has been meeting approximately once a month and considering an average of about 30 cases at each meeting.

In about 60 per cent of the cases considered by the Committee, the problem is one of assigning fees for procedures which are not listed in the schedule, or for which no precedent has been set in the past. Most of the fee problems have developed from multiple operations in which a full fee is paid for the major procedure and half a fee for the next highest minor, if two or more procedures are performed by the same surgeon in separate fields at the same time.

There has been a lot of misunderstanding on this point, and I would like to point out that the Plan does not provide a fee for each individual item the doctor might list as a surgical procedure performed under one anesthesia. Sometimes half a dozen procedures have been listed, and all of them were incidental to the primary procedure, and there would have been no reason to build up the case if the patient had not had Medical Service.

In other cases, the doctor does one procedure one day and brings the patient back to the hospital two days later for a similar operation on another side. Now there may be a number of reasons for not performing a bilateral operation on the first admission, but I think that, in some cases, one of the most compelling would be that Medical Service might mistakenly be expected to pay two fees if the procedures are performed on separate days.

The example I gave you is just one of many which exist wherever a doctor approaches Medical Service with a legal viewpoint to see how much can be obtained under the contract. Well, I think the Schedule of Fees is specific on that point, for it points out that multiple procedures done at different times for the same condition shall be submitted to the Committee on Physicians' Services. We don't pay double fees in these cases.

About 30 per cent of the Committee's time is spent on cases involving eligibility. These eligibility questions have to do mostly with whether or not the ailment existed at the time the contract was taken out. There is a great deal of confusion in the minds of Participating Physicians on this point. We keep getting letters from doctors saying the patient had no idea he would need an operation or even that the complaint existed when he took out the contract. So we have to write back and say that since December 1949 the contract has excluded for the first 10 months preëxisting ailments whether they're known or not known to exist. There will be a big saving in correspondence, time and patience when doctors stop writing in to tell us that Susie had no idea she had gallstones. What we need to know is did she *have* gallstones when she took out the contract, not did she know about it.

In many cases the Committee is convinced that every possible logical conclusion points to the preexistence of a tumor or some other ailment which became manifest after the contract was issued, and the Committee's decision to reject such a case is based on the medical experience of its members. We feel justified in turning down a case in which the preëxistence of the ailment, whether known or unknown at the time the contract is taken out, can be decided on the basis of reasonableness and medical background.

In a lot of these eligibility cases, we have to get histories or operative reports from the family doctor, the surgeon, and from the hospital. You'd be surprised how often these reports differ, and how often the surgeon's report seems to be pretty strongly in favor of the patient. Now, we all know that there is a great deal of sympathy on the part of the doctor toward his patient in dealing with insurance companies, and I think there is need to point out that Medical Service is not an insurance company—it is a Plan for prepaying surgical and obstetrical care which is sponsored and developed by the doctors in this area who provide that care. It's to our interest to keep this Plan solvent. We must keep it solvent and it is up to us to prevent abuses which might wreck it. If we ask you for a history so we can make a fair appraisal of a case which is under consideration, let's have an impartial history which gives the facts and a good medical opinion with regard to when the ailment first existed without going into so much detail about the patient's social background and integrity.

The other 10 per cent of our cases are for various minor items, and the greatest percentage of the cases in this category are those concerning non-Participating Physicians. In some of the cases disallowed because a non-Participating Physician was called in, the patient could have received benefits if the referring doctor or the hospital had called in a Participating Physician, and I think it is important that all of us keep that in mind when we call in another doctor for surgical treatment of a Medical Service patient.

The Committee has tried to be fair in establishing fees, and to keep them related to fees being paid under the schedule. Under the circumstances, it has sometimes been very trying to consider cases where the fees requested are clearly out of line with Medical Service's ability to pay. Fees of $1,000 and $1,500 are indicated as normal for surgery for which the Committee makes an allowance of $200, and the patient invariably complains that the Medical Service allowance is unrealistic. There are cases where the doctor simply adds the Medical Service allowance to his regular fee on the assumption that a patient has not only his own income but also insurance with which to pay the bill—all these are danger signs which we on the Committee on Physicians' Services have viewed with some alarm, and we hope you will too if the trend continues, because—"It *could* happen here!"

All reports were adopted by members of Medical Service, including one by Dr. Donald Stubbs, a member of the Board of Trustees, who summarized for those present the action of the Board in response to various recommendations made by the Participating Physicians.

ELECTION OF BOARD MEMBERS

The following were elected to serve on the Board of Trustees of Medical Service for 1952-53:

Dr. James Dusbabek, nominated by the Medical Society of the District of Columbia

Dr. G. Halsey Hunt, nominated by U. S. Public Health Service

Mr. Bruce Baird, nominated by the Commissioners of the District of Columbia

Dr. Daniel L. Seckinger, nominated by the District of Columbia Health Department

Dr. Philip Talbott, nominated by the Washington Board of Trade.

DR. STUBBS HEADS MEDICAL SERVICE

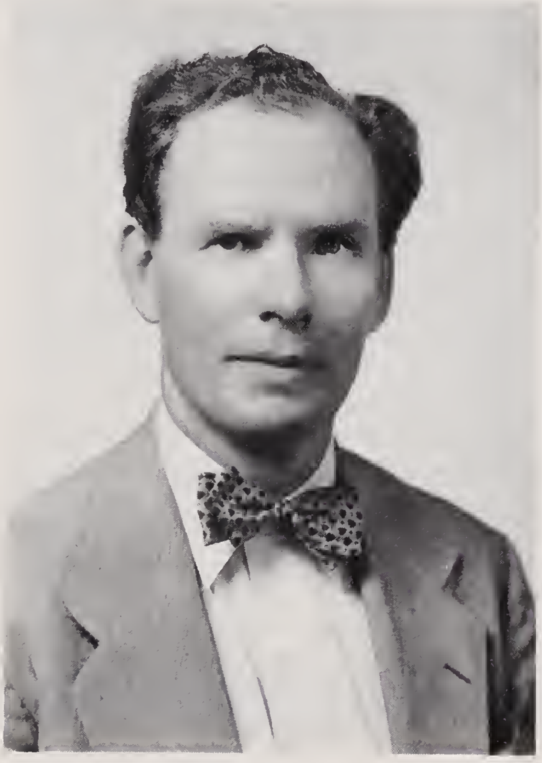
Dr. Donald Stubbs was elected President of Medical Service at the meeting of the Board of Trustees, May 22, 1952.

A native of Georgia, Dr. Stubbs received his medical education at George Washington University. He holds three degrees from this University, A.B. 1929, A.M. 1931, and M.D. 1932. He interned and served a residency in surgery at Emergency Hospital. He has been Civilian Consultant to the United States Army Medical Center since 1947 and is on the attending staffs of Emergency, Garfield, Doctors and Suburban Hospitals.

In addition to practicing his specialty, anesthesiology, Dr. Stubbs is an educator. His teaching career began in his high school days, when he was substitute teacher in physics and mechanical drawing. He was a Sanders Fellow in Psychology at George Washington University from 1929 to 1931, and until 1934 taught, successively, bacteriology, pathology, and clinical microscopy under the late Dr. Oscar B. Hunter. He was instructor in surgery at Georgetown University from 1934 to 1940, and also taught surgery at George Washington University from 1934 until he was appointed Clinical Professor of Anesthesiology in 1947.

He is a member of the Board of Directors and Executive Committee of Doctors Hospital, Chairman of its Executive and Teaching Staff, and Chairman of the Interne Committee. He organized the Pain Clinic at Gallinger and Doctors Hospitals.

Dr. Stubbs is a member of many scientific organizations and is Past President of two, the Southern Society of Anesthesiologists and the Potomac Society of Anesthesiologists. A charter member of the Medical Society's Section on Anesthesiology, he served as Temporary Chairman until the first regular election of officers was held in December 1946 and as Chairman of the Section in 1949–50. He is a member of the Editorial Board of the MEDICAL ANNALS, author of two books, and is a regular contributor to medical publications.



DONALD STUBBS, M.D.

President, Medical Service of the District of Columbia

All other officers of medical service were reëlected at this meeting. They are: Dr. William P. Herbst, First Vice President; Dr. G. Halsey Hunt, Second Vice President; Bruce Baird, Treasurer; Douglas R. Smith, Assistant Treasurer; Theodore Wiprud, Secretary; and George B. McGovern, Assistant Secretary.

Elected to serve on the Executive Board were Drs. Frank D. Costenbader, Arch L. Riddick and Henry L. Darner.

A decision was made to expand the Physicians' Services Committee from 6 to 9 members. Drs. Leo B. Gaffney and Oscar H. Fulcher were reëlected for a three-year term. Three new members elected to the Committee were: Dr. Robert Moran, for one year; Dr. Sterling Bockoven, for two years; and Dr. John M. Orem, for three years.

Concerning Those Who Work with Us

DENTISTRY

MEDICAL-DENTAL RELATIONS

KARL HAYDEN WOOD, Ph.G., D.D.S., F.A.C.D.

Associate in Dental Surgery, George Washington University School of Medicine; Chief of Oral Surgery, George Washington University, Columbia and Garfield Memorial Hospitals

The science of medicine and dentistry has indeed advanced since the country-doctor era and the time when dentistry was practiced by the local barber. Since then, both medicine and dentistry have made rapid and continuous progress.

Today, diagnosis is more accurate because of the X-ray and the many chemical tests made available by the pathologist. More reliable anesthetic agents are available, and there are, as you know, the many chemotherapeutic and antibiotic drugs. It is indeed a golden age for both sciences.

Today, both medicine and dentistry have their specialties in the various fields. Most of these specialties have Boards of Certification. Although dentistry has been much slower than medicine in its progress, it has come a long way since the days of the dentist who called himself "painless Parker." With a store window as his office, this showman literally "pulled" teeth for all to see. Whether the victim had any future extractions depended on his stoicism and stamina.

In dentistry, oral surgery was the first to be accepted as a specialty and was also the first in dentistry to have a Board of Certification. Other Specialty Boards in dentistry are orthodontia, prosthodontia, periodontia, oral pathology, and pedodontia. One of the requirements of the Oral Surgery Board is a two-year internship in a recognized hospital that has an oral surgery "set-up" approved by the Hospital Committee of the American Dental Association. It has been necessary to raise the specialty requirements of both professions from time to time to keep pace with the many scientific advancements and discoveries. We are now living in the atomic age, the age when the use of radioactive isotopes in medical and dental research is being discussed not only by physicists but by the medical and dental professions as well.

MEDICINE AND DENTISTRY CLOSELY RELATED

Today the oral surgeon is faced with problems not unlike those of the general surgeon, except his field is restricted to the head and neck, which includes fractures of the mandible and maxillae, tumors of the mouth, all types of infections of the oral cavity, and diseases of the mouth, as well as removal of teeth, both simple and complicated. In all oral surgical procedures, there is the possibility of complications. There is no way of predetermining that even the simplest type of tooth removal may not result in many different types of complications. The removal of the average tooth is considered a rather trivial matter by most patients, and often the same attitude prevails among both physicians and dentists. This is certainly a fallacy. In dental procedures there are the following types of patients: (a) the extremely nervous and apprehensive patient, (b) the very young patient, (c) the extremely elderly and senile individual, and (d) both the young and old patient suffering from other disorders as well. All must receive special treatment.

IMPORTANCE OF CASE HISTORIES

The dentist no longer feels that a patient who is physically able to walk up one flight of stairs and sit in a dental chair is necessarily a safe risk for the removal of a tooth under either local or general anesthesia. The oral surgeon now realizes that it is of utmost importance to have a complete case history on each patient prior to surgery. This case history should state the patient's present complaint, whether he has been treated recently by a physician, is still undergoing treatment, or is suffering from any systemic condition. This information is extremely important. In this way many pertinent facts about the patient are ascertained. There may be a sensitivity to procaine or epinephrine or a susceptibility to the so-called dry socket. The patient may have a history of hemorrhage following a tonsillectomy or from a simple tooth extraction. He may be receiving radiation to the mandible or the maxillae. Other conditions which may be determined from this history are: rheumatic heart disease, other diseases of the heart, diabetes, blood dyscrasias, thyroid disease, liver disease, tuberculosis, malignant disease, kidney disorders, and pregnancy.

It would be advantageous to the oral surgeon if he knew whether any of these conditions existed. A complete case history may save the patient's life, as well as saving the oral surgeon any embarrassment. I do not mean to imply that patients with a systemic disorder are not operable. However, more coöperation from the patient is needed, more careful attention from the oral surgeon required and, by all means, a consultation with the patient's physician indicated.

Consultation between Physician and Dentist

Having advance knowledge that a patient has a rheumatic heart condition, the oral surgeon first will want to consult with the patient's physician, then probably arrange for the patient to be hospitalized prior to surgery. Both pre- and postoperative antibiotic therapy is considered of utmost importance in these cases. One simple extraction for a rheumatic heart patient without these precautions might prove to be a very dangerous procedure, because of the danger of bacterial endocarditis. Likewise, when the oral surgeon knows his patient is a diabetic he may save himself embarrassment by putting away his surgical instruments for the time being. A diabetic is a poor operative risk, even under control. The oral surgeon should contact the patient's physician for previous blood levels and also know the present blood level. A report of the urinalysis should also be available. If a general anesthetic agent is to be administered, the patient should be hospitalized; again the antibiotics will play an important role prophylactically. The oral surgeon should work hand in hand with the diabetic patient's physician. His physician should know the time of the operation and should write all pre- and postoperative orders. He may wish to withhold insulin until after surgery or administer insulin prior to surgery, and have the patient receive glucose intravenously during the operation or immediately following it. Either the oral surgeon or the physician should consult with the anesthetist regarding the case and rely upon his judgment as to the type of anesthetic agent to be given. No one anesthetic agent is applicable to all patients at all times. By adhering to these principles, one may save a patient from insulin shock, coma or infection, to which these patients are so susceptible.

It is needless to explain the reasons for close coöperation between the physician and the dentist prior to oral surgery on patients suffering from blood dyscrasias, liver diseases, active pulmonary tuberculosis, kidney disorders, etc. A patient requiring special care is often referred by his physician to a dentist. This patient may be able to have only a minimum number of extractions at one time, or he should have a local anesthetic administered without adrenalin. Here again, valuable time would be saved for all concerned if the physician would write the instructions on a prescription blank or letterhead for the patient to present to the dentist at the time of his appointment. These examples are cited merely to emphasize the importance of close coöperation between the two professions.

By the same token, many times the physician may feel it necessary to call upon the dentist for consultation regarding a patient. I believe that a physician who is doing a complete physical examination on his patient, including chest X-ray, gastrointestinal study, an electrocardiogram, blood chemistry, etc., would achieve a more accurate and complete final diagnosis if he had access to a full mouth roentgenogram survey of his patient, with a written interpretation by the dentist.

It is a recognized fact that advanced periodontal involvement, apical osteitis, imbedded root fragments, and sometimes nonvital teeth can be a contributing factor, if not the cause of low-grade infections.

Even with patients who have an edentulous mouth and are wearing full upper and lower dentures, the roentgenograms many times reveal imbedded roots which were left in at the time of the extractions, and often osteitis is noted at the apex of these roots. Only by a routine roentgenographic survey will these conditions be found.

Very often X-ray examination will reveal one or more roots which have been inadvertently pushed into the maxillary antrum. On more than one occasion I have removed wisdom teeth which had been previously pushed into the maxillary antrum. One patient gave a history of having had a wisdom tooth removed 10 years before. For the last 5 years he had been suffering from sinusitis and a window had been made through the inferior turbinates and the antrum washed out periodically, this treatment giving only temporary relief. The patient was referred to our office by an otorhinolaryngologist for the purpose of X-ray and clinical examination. An anterior-posterior X-ray plate showed the wisdom tooth had not been removed, but had been pushed into the antrum at the time of the attempted extraction 10 years before. The tooth, as well as a large cyst, was removed from the antrum. Follow-up on the patient by means of an X-ray 6 months later showed the antrum to be free from pus, and the patient stated he had had no further symptoms.

Impacted, unerupted and malposed maxillary third molar teeth may often exert pressure and be the cause of facial neuralgia. Mandibular unerupted third molar teeth may be lying in the mandibular canal, exerting pressure on the mandibular nerve and causing pain in the ear. The patient may spend endless time and considerable amounts of money traveling from internist to otorhinolaryngologist, to neurologist, until finally he is referred to a dentist for a complete roentgenographic survey and clinical examination of the mouth.

Often the patient may complain of the so-called clicking jaw. The roentgenograms of both temporomandibular articulations appear to be negative as far as lesions are concerned. The patient continues to make the rounds until he is referred to a dentist, who finds many posterior teeth have been lost and no replacements made. The bite had closed due to the abnormal excursion of the condyle. After the bite is opened with artificial dentures or splints, the symptoms will usually subside.

Many patients come to a dentist after many months of mild pain in the face or swelling of the cervical glands without relief. An oral examination shows a tooth which, from all clinical appearance, is normal, yet the X-ray film reveals acute rarifying apical osteitis. After its removal the swelling and pain disappear.

Most ophthalmologists will agree that in many instances iritis can be traced directly to an abscessed tooth.

Often a swelling is noted in the floor of the mouth with enlargement of the cervical glands. After clinical examination and X-ray study by the dentist, it is proven to be nothing more than calculus in the submaxillary or sublingual gland.

Understanding of Each Other's Problems

Frequently a situation arises which can be very embarrassing to the oral surgeon. For example, the specialty of oral surgery sometimes involves operations of a rather serious nature. The removal of a deeply impacted and unerupted third molar tooth will necessitate the removal of bone from the mandible by the use of mallet and chisel technic. This may cause considerable trauma to the part, and the patient may have some swelling and pain. Even though the oral surgeon has given the patient instructions for postoperative care and a prescription for the pain, the patient often becomes alarmed and calls the family physician without the knowledge of the oral surgeon. This same physician, who is ethical to the utmost with his fellow practitioner, will call at the patient's home and take charge without even calling the oral surgeon.

Physicians should realize that the oral surgeons as a group are well versed in materia medica, therapeutics, and pharmacology, as well as the anatomy of the head and neck. Usually they have served a one-year internship and have had one or more years of postgraduate work, and many are certified by the Specialty Board. Knowing the oral surgeon to be well qualified, the physician need only explain to his patient, after examination, that the complications which have arisen are not unusual. He could then advise the patient that the oral surgeon is competent to follow through on oral surgical cases with sound judgment, and if a consultation is necessary the oral surgeon will get in touch with him. This would put the patient at ease and restore confidence in the oral surgeon. On the other hand, if the physician feels that the seriousness of the case warrants his attention as well, he should then contact the oral surgeon in order that they may work together to a successful and uneventful conclusion. Twenty-five per cent of malpractice suits have arisen from careless remarks made by the physician or dentist to the patient regarding services previously rendered by a colleague.*

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* News Letter, The Medical Society of the District of Columbia, May 15, 1951.

DENTIST'S RESPONSIBILITY TO THE PATIENT

Because their practice is mainly limited to office procedures, dentists as a group, I believe, seem to have one misconception: that their responsibility to the patient ends when they close their office at six o'clock. This is indeed a fallacy, to say the least. Many of these dentists even go so far as to have the home telephone number listed in their wife's name only so that it would be impossible for a patient to locate them after office hours. This procedure can and does have many ramifications. For example, having once started a case, the dentist is responsible to that patient until its conclusion. A tooth having recently been restored with filling material which was very close to the pulp chamber may become very sensitive a few hours later, and the only relief will be the immediate removal of the filling, the pulp, or the tooth itself, depending upon the severity of the case; or a patient who has had a recent extraction may bleed from the socket or surrounding tissue, which obviously would require the immediate attention of the dentist. These are but two examples of emergencies that may arise after regular office hours. When a patient is unable to locate a dentist, either because he refuses to answer calls after office hours or does not have his home number listed in the telephone directory, he is opening the way for a malpractice suit. He is also lowering the dental standards and thus selling his profession short. Neither is he creating good will toward his fellow medical practitioner who is called out in the middle of the night to stop a hemorrhage from a recent extraction or to prescribe a sedative for pain from a hypertrophied pulp.

BETTER MEDICAL-DENTAL RELATIONS IN THE INTEREST OF PUBLIC WELFARE

The need for closer coöperation between medicine and dentistry in the interest of individual health and public welfare has been stressed for years. Members of both professions agree that in many instances the joint services of physician and dentist would hasten recovery of patients and, in some cases, prolong life. However, despite this common knowledge, many dentists and many physicians fail to avail themselves of the knowledge and skill of their allied practitioners.

The Rhode Island medical and dental societies propose to attempt to correct this condition by launching a state-wide program of medical-dental relations, a program that will extend the boundaries of health care, provide the patient with better diagnostic service and treatment, and raise the standards of public health. Proposals made by a joint committee and approved by the state societies include: (1) the establishment of closer geographic and intellectual relations between medical and dental schools to the end that undergraduate students as well as practitioners in both professions will have a better understanding and be more sympathetic to the problems of their allied practitioners, (2) the improvement of hospital dental departments in order that they will be equal to the medical departments in teaching, research and services, (3) the development of courses of instruction for practicing physicians and dentists, these courses to be given under the joint auspices of the two societies and the extension division or medical science department of a university or school of liberal arts, (4) provision by the medical and dental societies of scientific programs in which dentists may collaborate with physicians in such fields as pediatrics, nutrition and cardiology, in order that the dentists may acquire practical knowledge which will enable them to serve their patients more effectively, (5) publication in the journals of both professions of more material of common interest to members of both groups, and (6) promotion of public health programs under the joint sponsorship of medical and dental societies.

The Rhode Island State Dental Society has entered the initial stage of the program by providing a course of lectures for physicians and dentists under the auspices of Brown University. Faculty members will discuss oral tumors, blood dyscrasias, nutrition, focal infection, pediatrics, and heart disease as they relate to the practice of dentistry.

Members of the professions in other states will watch with interest the progress of the Rhode Island program. It is a practical method of breaking down the barriers that have existed far too long between the two professions—barriers which have mitigated against the provision of the type of service that patients need and the professions are capable of providing.

With the present trend toward compulsory health insurance, it behooves both professions to work to-

(*Continued on page 412*)

News and Personals

A large delegation of Washington psychiatrists were in Atlantic City, New Jersey, the week of May 12–16, attending and participating in the **108th Annual Meeting of the American Psychiatric Association.** Dr. Daniel Blain, Medical Director of APA, gave his annual report at the opening session, May 12. Later in the week he reported on a survey which had been made to establish the extent and distribution of psychiatric skill and experience in the United States and Canada.

Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital, was presented the first Isaac Ray Award at the annual dinner, May 14. Dr. Leo H. Bartemeier, of Detroit, President of APA, called Dr. Overholser "a modern-day pioneer" in the field of psychiatry and its legal problems. Dr. Overholser, former President of APA and Professor of Psychiatry at George Washington University School of Medicine, has contributed many articles on psychiatric-legal matters to the literature and has served as chairman of the APA Committee on Legal Aspects of Psychiatry.

Dr. Isaac Ray, in whose memory the award was established, was one of the founders of APA in 1844. The award is based on a $10,000 gift to be divided into ten $1,000 awards. It also includes an invitation to give a lecture series on psychiatry at a medical school plus a book contract to have the lectures published. Dr. Overholser will deliver his lectures this fall at Harvard University.

Washington physicians contributed the following scientific papers at the meeting:

"Follow-up Study of Psychoneuroses: Implications Regarding Military Policies of Induction, Utilization, and Discharge," Drs. Norman Q. Brill and Gilbert W. Beebe

On psychotherapy: "Self-Rejection—A Clinical Manifestation," Dr. Henry P. Laughlin; "Reassurance," Dr. Paul Chodoff

"Japanese Psychiatry and Psychotherapy," Captain Avrohm Jacobson, MC, USAR, and 1st Lt. Albert N. Berenberg, MSC, USAR (by invitation), 141st General Hospital

"Psychiatry and Law: A Plea for Improved Rapport," Dr. Zigmond M. Lebensohn, who is a member of the Program Committee of the national organization.

Dr. Overholser was chairman of a Symposium on Group Psychotherapy, Theory and Practice, and moderator for a round table meeting on Vocational Rehabilitation as a Part of a Psychiatric Treatment Program.

Dr. Harvey J. Tompkins was chairman of a Symposium on Selection for the Armed Services. He was moderator at a round table meeting on Resolution of Inter-Disciplinary Conflicts and took part in a round table discussion on the Psychiatric Hospital Administrator.

At an open meeting of Committees on Professional Standards, Dr. George N. Raines represented the Committee on Nomenclature and Statistics and Dr. Addison M. Duval, the Committee on Psychiatric Hospital Standards and Policies.

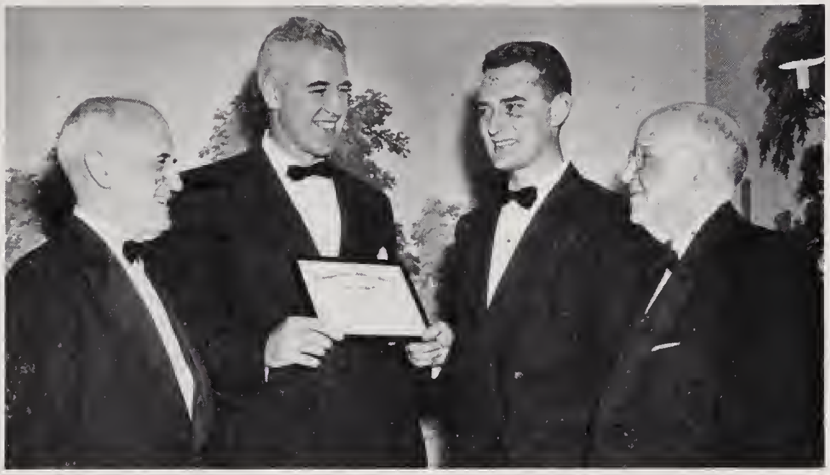
Dr. Frieda Fromm-Reichmann took part in a round table discussion on Constructive Forces in the Therapeutic Process.

Drs. Raines, Walter Freeman, T. Douglas Noble and Edith Weigert were discussants of scientific papers.

The Areal Meeting of the American Academy of Pediatrics at the Hotel Statler, May 22, 23 and 24, was attended by more than 2,000 pediatricians from Washington and the Eastern Seaboard. As might be expected, Washington physicians took a prominent part in plans for the meeting and many of them appeared on the scientific program. Dr. William S. Anderson, General Chairman, was assisted by Co-chairmen Hugh J. Davis and Harry A. Ong. Dr. Joseph S. Wall and Dr. Edgar P. Copeland were Honorary Chairmen. The various committees were headed by Washington physicians: Program, Dr. John A. Washington; Equipment, Registration and Information, Dr. Richard H. Todd; Housing, Dr. Milton M. Greenberg; Publicity, Dr. William F. Burdick; Scientific Exhibits, Dr. George Maksim; Entertainment, Dr. William A. Howard; and Hospital, Dr. Preston A. McLendon. Mrs. William S. Anderson was Chairman of the Ladies' Committee.

Dr. Wall, Emeritus Chief of Staff at Children's Hospital, gave a welcoming message at the opening session, May 22.

The following papers were presented by members of the Medical Society of the District of Columbia:



DR. SCULLY RECEIVES GIBSON AWARD

DR. JAMES H. SCULLY is shown holding the FRANK E. GIBSON AWARD certificate presented him by DR. WILLIAM E. BAGEANT, Chairman of the Committee on Awards of the Washington Medical and Surgical Society. DR. GEORGE B. TRIBLE (left) is President of the Society, and on the right is DR. FRANK E. GIBSON, for whom the Award has been named.

"Clinical Observations on Herpangina as Related to the Coxsackie Group of Viruses," Drs. Robert H. Parrott, Sydney Ross, Frederic G. Burke, and E. Clarence Rice, Children's Hospital and Georgetown University School of Medicine

"Visual Defects and Glasses for Children," Dr. Frank D. Costenbader, Children's Hospital and Episcopal Eye, Ear and Throat Hospital

"Emotional Adjustment in Adolescence," Dr. Reginald S. Lourie, Children's Hospital

"Cat Scratch Disease," Dr. Frank G. MacMurray, George Washington University School of Medicine, and Dr. Worth B. Daniels, Georgetown University School of Medicine

"Simulation of Cardiac Disease by Adrenocortical Failure in Infants," Dr. Catharine Q. Knop, Yater Clinic and Georgetown University School of Medicine, and Dr. Laurence Kyle, Georgetown University School of Medicine

"Idiopathic Familial Hyperlipemia with Sicklemia; Use of ACTH and Cortisone," Dr. Albert L. Gaskins, Philadelphia, and Drs. Roland B. Scott and Althea D. Kessler, Howard University School of Medicine

"Chronic Galactosemia," Dr. John Phillip McGovern, George Washington University School of Medicine and Gallinger Municipal Hospital

"Functional Adrenal Ganglioneuroma," Dr. Gordon W. Daisley, Jr., Children's Hospital and Georgetown University School of Medicine

Members of the Medical Society represented in the scientific exhibits were: Drs. Edward J. Beattie, Jr., Brian B. Blades, Frederic G. Burke, John F. Gillespie, Louis J. Goffredi, Charles A. Hufnagel, Vincent Iovine, Althea D. Kessler, Isidore Lattman, Fernando R. Leyva, Joseph LoPresti, George Maksim, Kenneth L. McCoy, William C. Meloy, Ralph L. Morrison, E. Clarence Rice, Monroe J. Romansky, Sydney Ross, Marshall C. Sanford, and Harold T. Yates.

Preceding the Areal Meeting, the **Children's Hospital Alumni Association** held its annual reunion at the Carlton Hotel, May 21. Dr. Joseph S. Wall, dean of Washington pediatricians, and Dr. Edgar P. Copeland, Chief of Staff at Children's, were honored at this meeting. Dr. Ross lauded the contributions to medicine which these two physicians have made and presented them with silver plaques.

The following officers were elected to serve the Alumni Association in 1952–53:

Dr. Preston A. McLendon, *President;* Dr. Harold M. Hobart, *Vice President;* Dr. Archibald MacPherson, *Secretary.*

The Washington Medical and Surgical Society held its 55th Annual Banquet in the Williamsburg Room of the Mayflower Hotel, May 17. Dr. George B. Trible, President of the Society, presided and welcomed the guests. Dr. Dennis A. FitzGerald, Assistant Director for Supply, Mutual Security Agency, was the principal speaker.

The highlight of the evening was the presentation of the **Frank E. Gibson Award.** This year's recipient was **Dr. James H. Scully,** general surgeon, who was recognized for having presented the outstanding scientific paper before the Society during the past year. The subject of his paper was "The Treatment of Metastic Malignancy from Breast Cancer." Dr. Scully, a graduate of Georgetown University School of Medicine, has published several papers on cancer. In addition to the certificate he received $25 in cash. Dr. William E. Bageant, Chairman of the Committee on Awards, presented the certificate and cash prize to Dr. Scully.

The George Washington University Medical Society held its annual business meeting, May 21. Dr. John H. Lyons, the retiring President, gave the President's Address, outlining some suggestions which the Society might follow in the future. Dr. Roy Lyman Sexton gave a showing of colored motion picture films.

New officers elected were:

Dr. Luther H. Snyder, *President-elect;* Dr. Leland E. Stevenson, *First Vice President;* Dr. Elma B. Carr, *Second Vice President;* Dr. Richard H. Fischer, *Secretary-Treasurer.*

Dr. Herman S. Hoffman is the new President for 1952–53. Dr. Lyons was elected Councilor for five years.

The Washington Orthopedic Club, in a meeting in the Medical Society's building, May 19, elected the following officers:

Dr. Julius S. Neviaser, *President;* Dr. Carl Berg, *Vice President;* Dr. Henry L. Feffer, *Secretary-Treasurer.*

The Annual Outing of the **Hippocrates-Galen Society** was enjoyed by members of the Society at the Congressional Country Club, May 7. Dr. Charles P. Ryland, retiring President of the Society, presided at the dinner in the evening. Senator Blair Moody, of Michigan, was the guest speaker.

Officers elected to serve for the coming year are:

Dr. George J. Stuart, *President;* Dr. George T. Sharp, Jr., *Vice President;* Dr. John W. Latimer, Jr., *Secretary-Treasurer;* Drs. Walter Romejko and Charles P. Ryland, *members of the Executive Committee.*

At a recent meeting of the Board of Directors of the **Diabetic Association of D. C.,** the officers for 1952–53 were elected. They are:

Dr. Samuel Benjamin, *President;* Dr. Lawrence A. Rapee, *First Vice President;* Dr. Lawrence J. Thomas, ~~*Second Vice*~~ *President;* Dr. K. Hammond Mish, *Secretary.*

The Section on General Practice met in the Library of the Medical Society, May 27. Mr. John C. Post, General Manager of Professional Business Services, was the guest speaker. He spoke on "Tax Tips for the General Practitioner."

Also on the agenda for this meeting was election of officers, all of whom were reëlected. They are:

Dr. Herbert S. Gates, *Chairman;* Dr. I. Phillips Frohman, *Vice Chairman;* Dr. Stewart M. Clapp, *Secretary-Treasurer.*

A Washington Chapter of the National Multiple Sclerosis Society has been formed with offices at 1346 Connecticut Avenue, N.W. Dr. Walter Freeman, Professor of Neurology of George Washington University School of Medicine, is Chairman of the Medical Advisory Board.

The purposes of the new group will be to raise funds for research, establish clinics for care of victims of the disease, and to inform the public about the disease and the advancements in the fight against it. The national society, organized in 1946, estimates there are about 250,000 victims in this country. It is most prevalent among persons between 20 and 40 years of age.

Officers of the new Chapter are: Marshall Hornblower, Chairman; Abraham Blustein, Vice Chairman; Joseph P. Tumulty, Jr., Treasurer; Miss Lucille Melling, Secretary. Among the trustees are: Renah F. Camalier, Commissioner-designate of the District; Lawrence F. Hurley, Editor of *Nation's Business;* and Omer W. Clark, deputy Veterans Administrator.

The first public meeting of the Chapter was held, June 4, at the Friends Meeting House. Dr. Freeman was one of the speakers.

The United States Naval Medical School celebrated its 50th anniversary, May 27. Rear Admiral Lamont Pugh, Surgeon General of the Navy, gave a brief outline of the history of the School and its accomplishments to guests assembled in the auditorium of the National Naval Medical Center, of which the School is a component part. Dr. Richard A. Kern, Professor and head of the Department of Medicine, Temple University School of Medicine, gave the School's annual Howard Wellington Smith lectureship in medicine. He discussed current medical problems in the Far East.

Guest of honor at the services was **Dr. Howard F. Strine,** one of the 12 graduates of the School's first training course for naval officers in 1902. Dr. Strine entered the School for postgraduate training after he had received his M.D. degree from Bellevue Hospital, New York, the same year. He served in the Navy until 1922, when he left the service to enter private practice of surgery in Washington. Dr. Strine is still engaged in the practice of medicine at 900-17th Street, N.W. He is an Active member of the District Medical Society.

The Public Health Service of the Federal Security Agency announces that during the first half of the current fiscal year 249 **new research grants** have been made to universities, hospitals, medical and dental schools, and other non-Federal research institutions to help support medical and scientific research activities. Among recipients of new grants in the District of Columbia are the following institutions and investigators:

George Washington University School of Medicine, Dr. Thomas McP. Brown: $10,000 from National Institute of Arthritis and Metabolic Diseases for study of hypersensitivity mechanism in collagen diseases

Georgetown University School of Medicine, Dr. Francis M. Forster: $9,500 from National Institute of Neurological Diseases and Blindness for evaluation of various therapies in cerebral vascular accidents

Washington School of Psychiatry, Dr. Robert A. Cohen: $28,674 from National Institute of Mental Health for study of effects of reorganization of mental hospital ward administration on recovery of patients

Children's Hospital, Dr. E. Clarence Rice: $1,600 from National Microbiological Institute for study of role of viruses in childhood diseases.

St. Elizabeths Hospital will discontinue in September its undergraduate **School of Nursing** which has been in existence since 1921. Postgraduate training of nurses in the care of mental patients will be continued. The Hospital has been operating the standard three-year training course for nursing students although one of the three years of training had to be completed by the student nurse at a general hospital in order to give her credits in pediatrics, obstetrics and other medical divisions in which little training experience was available in a mental institution. St. Elizabeths Hospital will continue to make its facilities available to those nursing schools both in the District and in other states which have been sending their students to the hospital for affiliate training in psychiatric nursing.

Precommencement Exercises for 84 members of the graduating class of **George Washington University School of Medicine** were held in the Medical Society's auditorium, May 27. The Oath of Hippocrates was administered to the class by Dr. Walter A. Bloedorn, Dean of the School of Medicine. Dr. Thomas M. Peery, Professor of Pathology, gave an address to the students entitled, "The Wayfarer," wherein he drew an analogy between the doctor's life and the life of the pilgrim in Pilgrim's Progress.

A trust fund, to be known as **The Oscar B. Hunter Memorial Fund,** has been established by the **George Washington University Medical Society,** and was adopted by the Society, April 16, 1952. The sum of $5,000 was taken from funds of the Society and will be administered by the Lincoln National Bank.

Each year, from this fund, a gift, to be known as the **Oscar Benwood Hunter Award in Pathology,** will be presented to the senior student of George Washington University School of Medicine who shows outstanding ability in pathology. The candidate for this award will be selected by the Scholarship Board of the Medical School. The amount of the award will be $100, or the amount of interest accrued on the funds of the trust during the year, whichever is the smaller. This cash award will be accompanied by a suitably engraved key and scroll and will be presented to the recipient by the University at the regular graduation exercises of the class of which the candidate is a member.

Allan Hugh Stewart, of Mount Shasta City, Calif., was named the first winner of the Hunter Award in Pathology, and received a check for $100 at the Precommencement Exercises of the School of Medicine, May 27.

The Rheumatism Society of D. C. held its annual meeting and luncheon, June 4, at the Army-Navy Club. The following officers were elected for 1952–53:

Dr. Charles H. McEnerney, *President;* Dr. Charles P. Ryland, *Vice President;* Dr. Milton C. Cobey, *Secretary-Treasurer.*

Calendar of Meetings, May 16–June 15

May 19	Washington Orthopedic Club
May 20	Grievance Committee
May 21	Lay Society, Diabetes Association of D. C.
May 22	Board of Trustees, Medical Service
	Board of Directors, Diabetes Association of D. C.
	Health Section, United Community Services
	Washington Heart Association
May 26	Executive Board
	Committee on Scientific Exhibits, Annual Scientific Assembly
	D. C. Society of Anesthesiologists
May 27	Traffic Committee
	Section on General Practice
	Precommencement Exercises of George Washington University School of Medicine
May 28	Health Section, United Community Services
	Medical Committee, D. C. Division, American Cancer Society
	Graduate Nurses' Association
June 3	Lecture by Sir Allan Daley sponsored by District Health Department
June 5	Committee on Attendance, ASA
June 6	Committee on Medical Care
June 10	Medical Officers' Reserve Units
June 11	Graduate Nurses' Association
June 12	Health Section, United Community Services
June 14	Section on Pathology and Laboratory Medicine

Physicians can assist in relieving the acute shortage of adequately trained nurses for both private homes and hospitals by suggesting to women friends and patients that they seek **training in the field of practical nursing.** On September 15 a new class for adult women will begin at the Burdick Vocational High School, 1300 Allison Street, N.W. This course is sponsored by the District of Columbia Public Schools and is accredited by the National Association for Practical Nurse Education. It is tuition-free for those residing in the District of Columbia.

The pre-clinical portion of the course covers 17 weeks of bedside nursing arts, physiology, and dietetics, given at the School. This is followed by a 32-week period of clinical practice at George Washington University Hospital. During this period the student is allowed $25 a month to help defray the cost of meals, laundry, etc.

Upon the satisfactory completion of both programs, the trained practical nurse will find attractive openings in private hospitals, in hospitals under Civil Service, in private nursing agencies, and in homes. The salaries are approximately three fourths of the professional nurses' salaries.

Prospective trainees should contact Mrs. Mary S. Resh, Principal, Burdick Vocational High School, National 6000, Ext. 2547.

Dr. G. Halsey Hunt, who is well known to Washington physicians through his membership on the Board of Trustees of Medical Service, has been appointed Assistant Surgeon General of the Public Health Service. He will serve as Associate Chief of the Bureau of Medical Services, which is under the direction of Dr. Jack Mansur.

The Bureau of Medical Services administers most of the direct medical care functions of PHS, managing its 22 hospitals located in major seaport cities and over 100 outpatient facilities. The Bureau also includes the Division of Foreign Quarantine, divisions concerned with medical, hospital, dental and nursing resources, and is responsible for the administration of the Hospital Survey and Construction Act.

Dr. Hunt received his medical degree from Columbia University College of Physicians and Surgeons in 1928. He entered the PHS as a commissioned officer in 1936, and came to Washington in 1945 to conduct a research study on medical group practice. In 1947 he joined the Bureau of Medical Services as Assistant Chief of the Division of Hospitals and became Chief in June, 1949.

Dr. Hunt is a Fellow of the American College of Surgeons and in 1951 was elected to its Board of Governors. He is a diplomate of the American Board of Surgery.

Dr. Walter A. Bloedorn, Dean of George Washington University School of Medicine, has been elected to membership on the National Board of Medical Examiners for a term of six years. The

National Board admits to its examinations those students who are enrolled in or who have graduated from approved medical schools in this country and Canada and from acceptable foreign schools.

At the 153rd annual commencement exercises of Georgetown University, June 9, honorary degrees were conferred on two Associate members of the District Medical Society, **the Reverend Paul A. McNally, S.J.,** Dean of Georgetown's School of Medicine, **and Dr. Sterling V. Mead,** President of the American Dental Association and formerly on the faculty of the Georgetown School of Dentistry.

Dr. Thomas F. McDermott, of New York, has been appointed Professor and Director of the Department of Anesthesiology at Georgetown University Medical Center. He succeeds Dr. Theodore Guenther, who resigned in February to enter private practice in Cincinnati. Dr. McDermott has been Assistant Professor of Anesthesiology at Columbia University's College of Physicians and Surgeons for the past year.

Dr. Murray M. Copeland, Professor of Oncology, Georgetown University School of Medicine, attended the Southeastern Surgical Conference at the Hotel Biltmore in Atlanta, Ga., March 10–13. On the last day of the Conference Dr. Copeland read a paper on "Diagnosis and Treatment of Certain Forms of Chronic Cystic Mastitis."

On April 1 and 2 Dr. Copeland participated in the Fifth Annual Telephone Seminar on Malignancy, sponsored by the Indiana University Medical Center, in Indianapolis, in coöperation with the Indiana Cancer Society. The seminar was held on Tuesday evening, April 1; by telephone it reached all the local cancer societies in the state. The following day Dr. Copeland presented a paper on "How to Manage Chronic Cystic Mastitis" at a Symposium on Malignancy.

Dr. Copeland lectured to the surgical staff and senior class of Vanderbilt University School of Medicine, Nashville, Tenn., on May 1. The subject of his address was "Cartilaginous Tumors of Bone." The following day he addressed the junior and senior classes, and the surgical staff, at Meharry Medical College in Nashville. The title of this lecture was "Tumors of the Breast."

Dr. Donald Stubbs was guest speaker at a meeting of the Cabell County Medical Society in Huntington, West Va., June 12. He read a paper on "Respiratory and Circulatory Emergencies."

On May 27 he addressed a group of physicians at St. Francis Hospital in Wilmington, Del., on "Anoxia in the Newborn."

Dr. William Brown Ingersoll is the new President of the **D. C. Dental Society.** He is a member of the faculty of Georgetown University School of Dentistry. Dr. Bruno G. Floria is Vice President and Dr. Karl H. Wood continues as Secretary-Treasurer. The new officers were installed at the annual meeting of the Society at the Shoreham Hotel, June 10. The Presidential Address was given by the retiring President, Dr. John A. O'Keefe.

Named President-elect was Dr. Francis J. Fabrizio, also a member of the Georgetown Dental School faculty. He will take office in June, 1953.

Dr. Emil J. C. Hildenbrand was elected to fellowship in the Industrial Medical Association at its meeting in Cincinnati in April.

Dr. Hildenbrand was recently reëlected to the Board of Visitors and Governors of Washington College, Chestertown, Maryland, for a 6-year term.

The D. C. Office of Civil Defense announces the appointment of **Dr. Richard H. Fischer** as Chief of the Volunteer Training Section of the Medical Care Services.

Major Joseph W. Cooch, MC, USA, visited Washington recently and informed the Secretary of the Medical Society that he has been commissioned in the Regular Army.

Dr. James F. Dowd will be away from Washington for some time, having accepted a position with the Coast Guard in New York City.

Dr. George J. Carroll, formerly of Washington, writes that he is now Director of Laboratories at the Louise Obici Memorial Hospital in Suffolk, Virginia.

Dr. Joseph C. McCarthy has moved to New York City, where he will practice general surgery. His office is located at 2325 University Avenue.

BOOK REVIEWS

Global Epidemiology, A Geography of Disease and Sanitation; Volume II: Africa and the Adjacent Islands. James Stevens Simmons, B.S., M.D., Ph.D., Dr.P.H., Sc.D. (Hon.), Brigadier General, United States Army, Retired; Dean and Professor of Public Health, Harvard University School of Public Health; Tom F. Whayne, A.B., M.D., M.P.H., Dr. P.H., Colonel, M.C., United States Army; Chief, Preventive Medicine Division, Office of the Surgeon General, U. S. Army; Gaylord W. Anderson, A.B., M.D., Dr.P.H., Mayo Professor and Director, School of Public Health, University of Minnesota; Harold Maclachlan Horack, B.S., M.D., Member of Staff, Department of Medicine and Section of Cardiology, Ochsner Clinic, New Orleans; Instructor in Medicine, Tulane University School of Medicine; Associate Author, Ruth Alida Thomas, A.B., M.A., M.P.H., Research Associate, School of Public Health, University of Minnesota; Instructor, Department of Tropical Public Health, Harvard University School of Public Health, and Collaborators. Price, $15.00. Pp. 652, with illustrations. Philadelphia: Lippincott, 1951.

This Global Epidemiology volume is even better than its admirable predecessor (Volume I: India, the Far East and the Pacific Area). The same general outline was followed. However, material dealing with social, racial and economic factors was added to make the geomedical picture more complete. These factors, incidentally, provided human interest. I found the book surprisingly readable and enjoyed learning about various races and the way they live. Global Epidemiology is highly recommended to students of world health and libraries.

Henry R. Wolfe, M.D.

Annual Report on Stress. Hans Selye, M.D., Ph.D. (Prague), D.Sc. (McGill), F.R.S. (Canada), Professor and Director of the Institut de Médecine et de Chirurgie expérimentales, Université de Montréal. Price, $10.00. Pp. 644, with illustrations. Montreal, Canada: Acta, Inc., 1951.

This book is the first of a planned annual series of volumes to be written by Dr. Selye as companions or supplements to his volume "Stress." The purpose of these volumes will be to tabulate the entire current literature which pertains to the subject of the general adaptation syndrome, and, more than this, to subject it to critical evaluation and to incorporate new and pertinent facts into the idea of the stress syndrome. This implies, of course, personal and to some extent partial criticism of the material by Dr. Selye as he sifts, accepts, and rejects investigations and ideas.

The book is written in its entirety by Dr. Selye himself. It must have been an enormous task, necessitating a review and evaluation of some 3,000 references, practically all published during the past year.

The structure of the book is the same as that used in the book "Stress," so that being familiar with the original book one can find the material in which he is interested in the same location in the companion volumes.

One must admire the magnitude of the idea and the execution of this volume. Its value is obvious even if one accepts it only as a guide to the entire literature on stress and does not accept the interpretations of Dr. Selye.

Patrick B. Storey, M.D.

The Changing Years: What to do about the menopause. Madeline Gray. Price, $2.75. Pp. 224. Garden City, N. Y.: Doubleday, 1951.

Madeline Gray has written a book which may well become a quiet best seller among women past forty years. Sitting down with the reader in friendly conversation, the author sustains throughout the book the reassuring approach with which she begins her discussion. Her emphasis is on the menopause being "another change" instead of "the change." She includes a chapter on menstruation which could be recommended reading for a woman of any age. She devotes three chapters to a lucid interpretation of the glandular changes and to the use of hormones in compensating for glandular insufficiencies.

In order to produce an authoritative book on a subject which, the author declares, has never been presented in adequate form for lay women before, she spent four years in reading, listening to medical lectures, interviews with doctors and women, and correspondence. At the end of the book she has carefully listed the names of 29 doctors who helped her, which list includes our own Dr. Edward J. Stieglitz, nationally known authority on geriatrics. She also includes the reading material she used to acquire the needed background for writing such a book and the books and articles she read for special chapters, such as the excellent one on menstruation, another on sex life after forty, the male change, and several others. The author has done a splendid job of assembling and organizing her material and finally of presenting it in a style that makes for extremely interesting and informative reading.

Physicians can well recommend this book to any woman patient who is apprehensive about the menopause. With confidence in the wisdom of her own body and with the guidance of her physician, the author emphasizes again and again, every woman can face the "changing years" without anxiety.

A. L. E.

A Textbook of Clinical Neurology—with an Introduction to the History of Neurology, 7th ed. Israel S. Wechsler, M.D., Clinical Professor of Neurology, Columbia University, New York; Consulting Neurologist, The Mt. Sinai Hospital, Montefiore Hospital and Rockland State Hospital, New York. Price, $9.50. Pp. 801, with 179 figures. Philadelphia: Saunders, 1952.

The merit of any book which passes through the seventh edition such as this book has done is self evident. For many thousands of medical students Wechsler has been the Bible of Clinical Neurology during their period of training and has always maintained a prominent place on their bookshelves for subsequent quick reference. The format of the book has remained relatively unchanged through these many editions and attests to the good sense used at the time of its original conception. It seems to the reviewer, however, that there have been several missed opportunities in a book of this character to emphasize certain points of considerable significance in diagnostic and therapeutic neurology. For example, an excellent discussion is given of the Queckenstedt method on page 77, but no word of caution is included in regard to its application in those cases where intracranial pressure seems high. The hazard of the procedure under such circumstances can hardly be overestimated. On page 214, after an excellent discussion on the diagnosis of ead poisoning, short shrift indeed is given to its treatment. Certainly the problem is of sufficient magnitude to justify more than a comment such as, "Magnesium sulfate is given in lead poisoning." A minor and understandable error is found on page 280 where the syndrome of Tapia is incorrectly referred to as the syndrome of Jackson.

Currently there is great interest and concern in regard to temporal lobe seizures and psychomotor epilepsy, yet an exceedingly small proportion of the chapter on epilepsy is devoted to this important phase of the disorder. Scattered through the chapter are phrases such as "poriomania, epilepsia procursiva or rotatoria, larval epilepsy, laryngeal vertigo," etc.—all archaic terms now embraced by the phrase, "psychomotor seizures." It is unfortunate that this has not been properly emphasized.

One of the outstanding features of this book is the clarity of the pictures. I have not seen such consistent high quality of photographic reproduction in a textbook for many years. Furthermore, these photographs are well chosen and gratifyingly illustrate the point made in the text. Dr. Wechsler has very wisely included a considerable amount of pathologic material in the photographs, which serves to further illustrate the disorder being described.

The latter portion of the book is devoted to a discussion of the neuroses and other functional disorders of the nervous system and includes an excellent chapter of a philosophical nature on the relation of trauma to nervous system disease. It is always a pleasure in any textbook of medicine to find a chapter on the historical aspects of the subject being treated and this is particularly well presented in this book. Each chapter has an excellent though short bibliography containing a number of current items.

The book is well bound and easy to hold; the type face is clear, and the words and lines are not crowded. The paper is a semi-gloss which has the advantage of feeling nice and at the same time reflecting a minimum amount of light into the reader's eyes.

This book may be unhesitatingly recommended to the general practitioner as a reference book, to the student as a textbook, and to the advanced neurologist as a refresher. Its shortcomings are minor and its accomplishments are vast and complete.

J. M. W.

The Management of Obstetric Difficulties, 4th ed. Paul Titus, M.D., Obstetrician and Gynecologist to the St. Margaret Memorial Hospital, Pittsburgh; Consulting Obstetrician and Gynecologist to the Shadyside Hospital, Pittsburgh; Secretary of the American Board of Obstetrics and Gynecology; Member, Reserve Consultants Advisory Board, Bureau of Medicine and Surgery, United States Navy (Captain, MC, USNR). Price, $14.00. Pp. 1046, with 446 illustrations and 9 color plates. St. Louis: Mosby, 1950.

Having read this book completely, and having re-read the more oustanding parts, I feel that Dr. Titus has fulfilled his aim, "to develop a practical aid to physicians who are meeting and contending with obstetric difficulties and emergencies." Not only will the book be of practical value to the general practitioner, but it also will be useful to the obstetrician since it provides readily available information to add to his knowledge regarding the proper management of obstetric patients.

It is obvious that this textbook was not intended to replace but rather to supplement the conventional obstetric textbook. Much of the basic and fundamental information ordinarily found in the latter, therefore, has been deliberately omitted, and many abnormal conditions and interesting operative procedures have been presented.

The book is divided into eight sections, namely, (1) Sterility, (2) Difficulties in Diagnosis of Pregnancy, (3) Complications of Pregnancy, (4) Complications of Labor, (5) Obstetric Operations, (6) Complications of the Puerperium, (7) The Newborn Infant, and (8) General Obstetric Topics. To make for easier understanding and more lasting knowledge of these subjects, the author has used 446 illustrations and 9 color plates, most of which are original works.

In order to help the overworked physician who would find it an extra burden to choose for himself from among divergent views and undecided issues, especially in times of emergency, Dr. Titus has not hesitated to express his own views or preferences as to procedures.

An interesting feature in connection with the preparation of this edition is that Dr. Titus held a conference with Dr. J. P. Greenhill, the author of DeLee-Greenhill's "Principles and Practice of Obstetrics," and Dr. Nicholson J. Eastman, author of "Williams' Textbook of Obstetrics," in order to insure greater uniformity with respect to certain terms and definitions, and to reach some agreement on classifications and procedures about which there has been a definite lack in the past.

LOUIS JOSEPH MACIULLA, M.D.

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additional current books which, in their opinion, merit comment.

Advances in Medicine and Surgery, from The Graduate School of Medicine of the University of Pennsylvania. Price, $8.00. Pp. 441 with 43 figures. Philadelphia: Saunders, 1952.

Figure Della Medicina Contemporanea Italiana. GIOVANNI P. ARCIERI, Docente di Storia della Medicina. Pp. 350. Milano: Fratelli Bocca Editori, 1952.

Principles of Refraction. SYLVESTER JUDD BEACH, A.B., M.D., F.A.C.S., Consultant, Staff Maine Eye and Ear Infirmary; Chief Ophthalmologist, Portland City Hospital; Member of Staff, Maine General Hospital; Past President, Portland Medical Association and New England Ophthalmological Society; Council, National Society for Prevention of Blindness; Co-founder, Ophthalmological Study Council; Member of Council, Academy of Ophthalmology and Oto-Laryngology; Chairman, Section on Ophthalmology, American Medical Association; Past President, American Ophthalmological Society; Past Secretary and Emeritus Member, American Board of Ophthalmology. Price, $4.00. Pp. 158, with 18 illustrations. St. Louis: Mosby, 1952.

The Scalp in Health and Disease. HOWARD T. BEHRMAN, A.B., M.D., Assistant Clinical Professor of Dermatology, New York University Post-Graduate Medical School; Adjunct Dermatologist, Mount Sinai Hospital; Attending Dermatologist, Hillside Psychiatric Institute; Formerly Associate Dermatologist, Bellevue Hospital, and Assistant Attending Dermatologist, University Hopsital; Fellow in Dermatology, New York Academy of Medicine; Member, Committee on Cosmetics, American Medical Association; Society of Cosmetic Chemists; Society for Investigative Dermatology; Fellow, American Academy of Dermatology; Diplomate, American Board of Dermatology. Price, $12.75. Pp. 566, with 312 illustrations. St. Louis: Mosby, 1952.

An Analysis of the Multi-test Clinic of Richmond, Virginia. WALTER E. BOEK, Director of Research, Health Information Foundation, New York. Assisted by Jean K. Boek, Research Associate. Pp. 267. New York: Health Information Foundation, 1951.

The Toxemias of Pregnancy, 2nd ed. WILLIAM J. DIECKMANN, S.B., M.D., Mary Campau Ryerson Professor and Chairman of the Department of Obstetrics and Gynecology of the University of Chicago; Chief of Service of The Chicago Lying-in Hospital and Dispensary; Attending Gynecologist, Albert Merrit Billings Memorial Hospital of the University of Chicago; Associate Editor of the *American Journal of Obstetrics and Gynecology*. Price, $14.50. Pp. 710, with 85 illustrations and 1 color plate. St. Louis: Mosby, 1952.

The Origin of Life and the Evolution of Living Things; An Environmental Theory. OLAN R. HYNDMAN, B.S., M.D., F.A.C.S. Price, $8.75. Pp. 648. New York: Philosophical Library, 1952.

Histopathological Technic including a Discussion of Botanical Microtechnic. ARAM A. KRAJIAN, Sc.D., formerly in the Department of Pathology, Los Angeles County General Hospital, Los Angeles, Calif., AND R. B. H. GRADWOHL, M.D., Pathologist to Christian Hospital; Director, Gradwohl School of Laboratory and X-Ray Technique, St. Louis, Mo. Price, $6.75. Pp. 362 with 131 text illustrations and 7 color plates. St. Louis: Mosby, 1952.

Dynamic Psychiatry; Transvestism—Desire for Crippled Women. Volume II. LOUIS S. LONDON, M.D. Price, $2.50. Pp. 127 with 50 figures. New York: Corinthian Publications, 1952.

Elementary Medical Statistics—The Principles of Quantitative Medicine. DONALD MAINLAND, M.B., ChB., D.Sc., F.R.S.E., F.R.S.C., Professor of Medical Statistics, Division of Medical Statistics, the Department of Preventive Medicine, New York University

College of Medicine. Price, $5.00. Pp. 327, with 23 figures. Philadelphia: Saunders, 1952.

A Textbook of Pharmacology—Principles and Application of Pharmacology to the Practice of Medicine. William T. Salter, M.D., Professor of Pharmacology, Yale University School of Medicine. Price, $15.00. Pp. 1240, with 284 figures. Philadelphia: Saunders, 1952.

The Story of the Adaptation Syndrome (told in the form of Informal, Illustrated Lectures). Hans Seyle, M.D., Ph.D. (Prague), D.Sc. (McGill), F.R.S. (Canada), Professor and Director of the Institut de Médecine et de Chirurgie expérimentales, Université de Montréal. Price, $4.50. Pp. 225, with illustrations. Montreal, Canada: Acta, Inc., 1952.

Surgical Forum: Proceedings of the Forum Sessions, Thirty-seventh Clinical Congress of the American College of Surgeons, San Francisco, California, November, 1951. Surgical Forum Committee: Owen H. Wangensteen, M.D., F.A.C.S., Minneapolis, *Chairman.* Price, $10.00. Pp. 667 with 290 figures. Philadelphia: Saunders, 1952.

Ciba Foundation Conference on Isotopes in Biochemistry. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., Editor for the Ciba Foundation. Pp. 288, with 79 illustrations. Philadelphia: Blakiston, 1951.

GAIUS MARCUS BRUMBAUGH, M.E., M.S., M.D., Litt. D.

(1862–1952)

Dr. Gaius M. Brumbaugh, a Life member of the District Medical Society, who had observed his 90th birthday a week earlier, died, May 14, 1952, at his home, 1954 Biltmore Street, N.W., following a long illness. He had practiced in Washington for more than 50 years and still maintained his office at 905 Massachusetts Ave., N.W., at the time of his death.

Dr. Brumbaugh was an authority on genealogy and for 26 years was Editor of the National Genealogical Society's *Quarterly.* He had published genealogies of the Brumbach and Fouse families, the Revolutionary War records of Maryland, Virginia and Kentucky, and had edited lists of 18th century Swiss emigrants to America. His eminence and achievement in genealogical research, his avocational interest, led to his inclusion in Who's Who in America. On his 90th birthday, May 7, the Genealogical Society presented him with a certificate honoring him for his work.

Dr. Brumbaugh was born in Huntingdon County, Pennsylvania, May 7, 1862, the son of a physician and surgeon, Dr. Andrew B. Brumbaugh, and Mrs. Maria Frank Brumbaugh. He was educated in private schools and received an M.E. degree from Juniata College, Huntingdon, Pa., in 1879. He later received a Master's degree (1898) and honorary doctorate (1926) from Juniata, where he was long Chairman of the Board of Trustees and Honorary Chairman at the time of his death. His father was one of the founders of the College.

Dr. Brumbaugh earned medical degrees from both Howard and Georgetown University Schools of Medicine, the former in 1885 and the latter in 1888. For several years he was Assistant Chief of the Bureau of Animal Industry, Department of Agriculture, and a member of the Board of Pension Examining Surgeons. He began his private practice of medicine in Washington in 1887.

For many years he lectured at the National Training School for Nurses of Sibley Hospital. He was a member of the American Medical Association and a member of the District Medical Society since 1890. He was also a member of the Sons of the American Revolution.

His wife, Mrs. Catherine Brown Brumbaugh, daugher of a Washington physician, whom he married in 1889, survives him together with a son, Elliott F. Brumbaugh, of Chevy Chase, Md., and a sister, Mrs. Alfred P. Silverthorn, of Sebring, Florida.

HARRY SAMUEL LEWIS, M.D., F.A.C.S.

(1880–1952)

Dr. Harry S. Lewis, Washington surgeon, who had long maintained offices and a clinic with his brother, Dr. Edward Lewis, at 1714 Rhode Island Avenue, N.W., died, May 14, 1952, at his home, 4717 Linnean Avenue, N.W. He was Past President of the Hebrew Home for the Aged and for many years a member of its Board.

Dr. Lewis was a native Washingtonian, born February 10, 1880, the son of Solomon and Bertha E. Lewis. He received his early education in the public schools of the District of Columbia.

In 1910 Dr. Lewis graduated from George Washington University School of Medicine. The next two years he interned at Emergency Hospital, following which, from 1912 to 1917, he was Superintendent of the Hospital. He continued on the staff of the Hospital as Associate in Surgery until 1921.

Dr. Lewis was commissioned Lieutenant in the Navy during World War I; he served as a Selective Service physician during World War II.

He was a founder and Past President of the Jacobi Society of Washington, a Fellow and Life member of the American College of Surgeons, a member of the American Medical Association, an Active member of the Medical Society of the District of Columbia since 1912, and a member of the George Washington University Medical Society. He was an honorary member of Phi Alpha Fraternity.

In addition to his brother, who is also a member of the District Medical Society, Dr. Lewis leaves his wife, Mrs. Lillian E. Lewis; another brother, George Lewis, of Richmond, Va.; and a sister, Mrs. Ann Lewis, of Washington.

Cancer in Women—Bieren

(*Continued from page 378*)

Reported as a squamous-cell carcinoma, it was removed by laryngeal fissure.

Routine Use of Vaginal Smears

For economic reasons it has not been possible to do routine Papanicolaou smears in this group. If done once a year as adjunct to a physical examination their cost would equal the salaries of 2 full-time physicians. Undoubtedly in some instances, as in case no. 5, a smear would have allowed earlier diagnosis, provided that the woman had reported for the test. It is also possible that a smear performed a year before as part of her annual physical examination would have resulted in a diagnosis of cancer at that time. Conceding this to be true, the cost of finding this 1 case in the 5-year period reported would have been close to a hundred thousand dollars.

Conclusions

Physicians who include the breasts, pelvic organs and rectum in routine physical examinations should regularly discover over 80 per cent of the detectable cancers in women at an early stage. This assumes that positive results and suspicious symptoms will be pursued to the limit of diagnostic possibility, with biopsies when indicated.

Properly performed vaginal smears undoubtedly discover occasional cases of uterine cancer in an earlier stage than is possible by ordinary examination. As yet their cost is too great to make them generally practicable as a routine procedure.

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Medical-Dental Relations--Wood

(*Continued from page 401*)

gether for better relations and closer understanding of each other's problems, that they may be in a better position to cope with any eventuality that may arise which would be detrimental to the health care of the Nation.

There is an organization in Washington, the Interprofessional Conference, composed of representatives of the medical, hospital, nursing, pharmaceutical and dental groups, organized about 10 years ago by Mr. Theodore Wiprud, Secretary of the Medical Society of the District of Columbia, for the purpose of cementing better relations between the allied groups of the healing arts. Although not too much progress has been made by this group, it is at least a step in the right direction.

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THERAPY OF POLIOMYELITIS

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The purpose of this paper is to summarize the accepted methods of treatment of poliomyelitis. Numerous articles have been written on this subject in the past, many of which have advocated the use of a particular drug or mode of therapy. These will be mentioned and briefly discussed. I shall also attempt to outline a method for routine handling of these patients and their families.

Poliomyelitis may be divided into 3 distinct stages.[1]

1. *Acute Stage or Stage of Acute Febrile Illness.* This may be divided into (a) preparalytic and (b) paralytic phases.
2. *Convalescent Stage or Stage of Recovery.* This stage lasts approximately 16 months after the acute stage. It is the period during which muscles may regain their power. Two phases are differentiated here: (a) sensitive phase—pain and muscle spasm present, and (b) insensitive phase.
3. *Chronic or Residual Stage.* No further muscle recovery is to be expected, although the functional capacities of the patient may be greatly improved by sound orthopedic management.

Since we, as pediatricians, are primarily concerned with the acute stage, most of my remarks will deal with therapy of the acute febrile illness.

TREATMENT OF THE ACUTE STAGE

Preparalytic Phase. Poliomyelitis should be considered in the differential diagnosis of any febrile illness, especially during the polio season. Any patient with an undiagnosed illness which might be the first phase of the diphasic type of onset should be placed on limited activity or preferably bed rest and kept there for a sufficient period after the temperature has returned to normal to rule out the possibility of this disease.

It has definitely been shown that muscular exertion in the early febrile period is associated with a significant increase in the incidence and severity of subsequent paralysis.[2, 3] Sleep is very important in this early stage. Hence, the argument arises as to whether the patient should be cared for at home or sent to the hospital. The patient can be better evaluated and usually better cared for in the hospital. The availability of special equipment certainly makes it imperative that any child suspected of being seriously affected should be sent to the hospital. The child with a mild, slowly progressing or quiescent case can often be observed at home, however. Home care eliminates the trauma and fatigue frequently associated with travel to the hospital. In addition, in many homes, the attention to the patient's comfort and ordinary needs is better than in the crowded polio wards of the average hospital during an epidemic. The psychic trauma of separation from the family and isolation in a strange place is an important consideration also.

The diagnosis of poliomyelitis is made from the symptoms and signs and corroborated by results of examination of the spinal fluid. The presence of a negative spinal tap does not rule out this disease. Should a tap be done invariably? Before the signs of weakness or paralysis set in, in the presence of signs of meningeal irritation, a spinal tap must be done to rule out meningitis or strengthen the diagnosis of polio. In the presence of paralysis and other signs, a spinal tap is usually unnecessary, since the diagnosis is obvious. Then the physical exertion and psychologic trauma associated with the tap may do more harm than good. Repetition of the spinal tap during the febrile period certainly requires strong indications.

Paralytic Phase. Here again, absolute bed rest is very important. The use of hot packs is at present the most satisfactory method of alleviating the pain and muscle spasm which are predominant symptoms. These packs should be applied often enough to modify the symptoms, but not so often nor for so long a time as to further dehydrate a patient already dehydrated by fever, anorexia, and climatic conditions.

Since in early cases most of the tight muscles are posterior, that is, neck, back and hamstrings, laid-on packs with the patient prone are adequate and disturb him less than wrap-around packs. These prone packs are applied for 10 minutes, then renewed for 10 minutes. Usually 3 such sessions daily, with a standing repeat order in case of discomfort at night, are satisfactory. Unless the patient is sleeping, packs may be followed with gentle, passive motion, but always short of pain and fatigue.[4] Patients receiving hot packs for any length of time should be given salt by mouth (Thermotabs) 1 to 3 times daily. Stat packs to selected, especially tender or painful areas may need to be ordered to provide optimum relief and allow the patient a maximum amount of rest.

Careful attention to position of parts, especially in the presence of spasm, weakness or paralysis is necessary. The patient should be kept in anatomic position with special supports beneath the knees and ankles and against the soles of the feet. Occasionally, muscle pain is so severe that assumption of an anatomic position is impossible. Yet, with careful attention to position, gentle passive motion, the use of hot packs and occasionally a sedative or analgesic drug, much can be done to prevent the permanent deformity that will result from continuous poor position.

Sedative drugs may be used with caution. However, it is probably best not to use these if there is danger of respiratory involvement or bulbar paralysis. Any patient in the acute phase of the disease should be carefully watched for evidence of this spread. Weakness or paralysis of an arm, and especially of the shoulder girdle, indicates cervical cord involvement and the very real possibility of phrenic nerve involvement. Bulbar spread is indicated by such signs as irregularity of respiration, difficulty in swallowing, changes in voice, facial nerve involvement, etc. Spinal respiratory paralysis, i.e., intercostal and/or phrenic nerve involvement, is heralded by signs of diminishing respiratory excursion, asymmetric or other abnormal yet rhythmic motions of the chest, use of accessory muscles of respiration, and shortness of breath or cyanosis.[1]

The use of drugs to relieve the pain and spasm is the subject of much debate. Aspirin can usually be given and occasionally codeine can be given if there is no danger of respiratory center depression. From time to time glowing reports on the use of a certain preparation as a cure or for dramatic relief of symptoms appear in the literature only to be later contradicted, and the drug discarded. Accordingly, the Therapeutic Trials Committee of the Council on Pharmacy and Chemistry of the American Medical Association[5] set up certain criteria for the evaluation of all therapeutic agents in this disease. The effects of therapy to be desired were named: alleviation of symptoms, prevention of death and paralysis, and more complete restoration of full muscle function. They listed many variables in therapy that must be considered:

1. Variations in diagnostic criteria. Before any new treatment is tried, we must be certain we are dealing with polio.

2. Unpredictability of the course and outcome. A patient may show extensive muscle involvement during the acute stage and have no residual paralysis or weakness at the end of 18 months; or a patient with only minor involvement at the onset of the disease may be severely crippled. Some show remarkable spontaneous recovery from seemingly severe paralysis; in others there may be no paralysis at all. Therefore, it is important not to credit a therapeutic agent with the spontaneous improvement that may have naturally occurred without the drug.

3. Variations of virus. There are now thought to be 3 distinct immunologic strains of the virus. Whether these produce different clinical courses and perhaps will show different clinical response to therapeutic agents is not known.

4. Geography and climate. Response to therapeutic agents may vary in different locales and in different climates.

5. Age. There may be a variation of effects in adults and children.

6. Time differences. Epidemics vary from year to year in severity. Therefore, a drug must be tried and controlled at the same time.

7. Variations in methods of appraising condition of patient. Any patient's response is based on his subjective evaluation of pain and tenderness, or the evaluator's estimate of muscle spasm and weakness, and ultimately on deformity and muscle function. Therefore, the judgment and experience of the person making the examination is extremely important and extremely variable.

8. Variations in technics of applying treatment. A drug administered with strong suggestion may be reported as giving greater relief than the identical drug administered without this. The stage of the disease is important. For example, an antibiotic must be tested during the acute febrile stage when the virus is presumed still to be active.

With these variables in mind, the Council recommended that proper evaluation of any treatment method should include patients with various types of viruses utilizing different geographic sources and different seasons of the year. They describe in detail the "randomization" scheme for proper selection of controls and emphasize the importance of the controls receiving everything given the treated patients with the exception of the specific treatment itself. Any procedure or agent which would tend to confuse or augment the possible actions of the agent being tested must be eliminated from the basic therapeutic regimen. The personnel administering the agent must handle the same number of controls and treated patients to decrease the effect of different technics on the results.

Because of the many difficulties in evaluation of a therapeutic agent it is easy to see why each year a new agent is touted as the answer to the polio problem, only to be later discarded as useless. Some of the better known drugs and their rationale for therapy will be touched upon.

Since a definite lowering of skin temperature and plethysmographic changes indicating decreased blood flow have been noted in areas affected with muscle spasm, vasodilating drugs were tried. Priscoline has been tried at Children's Hospital and elsewhere and, in general, has been discarded as unsatisfactory.[6, 7] Hexamethonium, or Bistrium, was tried in Children's Hospital during the summer of 1951 with no appreciable relief of symptoms.[8]

In an attempt to block nerve impulses to muscles in spasm, curare was tried. This had a rather short duration of action and was found to be of questionable value and quite dangerous. Tubadil, a new type of repository curare in an oil base for prolonged action, was tried on 30 patients by St. Martin and Wolfe in the 1951 Shreveport, Louisiana, epidemic without appreciable benefit and with some toxicity.[9]

In an attempt to augment the nerve impulses to diseased muscles, prostigmine has been tried, with poor results.

Aureomycin, having proved of value in some virus diseases, was tried extensively in polio without effect.[10] Darvisul, a promising sulfonamide derivative, was given a trial at Children's Hospital and elsewhere, with poor results.[11]

ACTH and cortisone have been found not only to have no value in the relief of symptoms,[12, 13] but there is experimental evidence to show that ACTH may render the host slightly more susceptible to paralysis.[14, 15]

Blood plasma was used after it was demonstrated that there was often a drop in the albumin fraction of blood protein in acute polio. Results are equivocal, but some investigators have been encouraged by the results in their small series.[16, 17]

Convalescent serum has been discarded as of no value despite early favorable reports.[18]

Gamma globulin has been shown to be of no value.[19]

Many other drugs have been tried with similar poor results. At the present time hot packs remain the treatment of choice for relief of muscle spasm.

In the acute phase of the disease certain complications must be handled properly to prevent death of the patient. Spinal respiratory muscle involvement is an indication for use of a respirator. The patient should be placed in a respirator as soon as this weakness manifests itself, rather than be made to wait until use of the apparatus is absolutely necessary, thereby further tiring already weakened muscles. The tank respirator, or iron lung, provides the best respiratory exchange by means of extrathoracic negative pressure. The Monaghan chest respirator, although not as satisfactory, works in this same manner. Other respirators include intermittent positive pressure breathing apparatus, used via a face mask or hood or attached to a tracheotomy tube, and a rocking bed, in which the abdominal contents are shifted against and away from the diaphragm to produce diaphragmatic breathing. These latter respirators are chiefly of value in weaning a patient from the tank respirator after he is over the most acute stage. In most cases, when a patient is acutely ill and has respiratory difficulty due to spinal polio, the tank respirator is the respirator of choice. Patients in the tank respirator must be watched for evidence of anoxia, atelectasis, pulmonary edema or pneumonia, and venous thrombosis. The patient should be moved frequently. Since abdominal pain may indicate nephrolithiasis or appendicitis, it is imperative that the patient have at least one bowel movement daily and that his urine be checked periodically.

Bulbar polio is the most serious form of the disease, especially if the lower cranial nerves, Cr 9, 10, 11 and 12, or the vital respiratory or vasomotor centers are involved. Involvement of the soft palate, tongue, pharynx or larynx may be present with changes in voice, swallowing difficulty, or regurgitation through the nose. Treatment, of course, depends upon the symptoms. Good nursing care is essential. The patient should be in Trendelenburg position for postural drainage, and suction of the pharynx may be frequently necessary. Suction should never be through the nose because this will ultimately increase secretions due to mechanical irritation. If there is no evidence of swallowing difficulty, the patient may be fed with caution. However, at the first sign of dysphagia he should receive nothing by mouth and be given parenteral fluids. The amount of sodium in these solutions should be carefully watched in order to prevent overadministration and edema. Protein, in the form of blood, plasma or hydrolysate, should be given daily, as part of the parenteral feedings. Whether or not the use of hypertonic glucose solutions is indicated in an attempt to decrease cerebral edema has not been proved, but there seems to be no correlation between the amount of cerebral edema, if present, and symptoms, and therefore the value of this therapy is questionable.[3, 20]

Respiratory center involvement is present when the patient has irregular, shallow breathing when not thinking about breathing. Frequently these patients can take a big breath if asked to do so provided their respiratory muscles are intact, and a conscious effort to breathe may be necessary. Sedation in this stage may eliminate this conscious breathing effort, and the patient will die. Therefore, any sedation during the acute stage of polio when the disease may possibly spread over more of the body, and certainly in patients with respiratory difficulty, is strongly contraindicated. Cutaneous sensory and drug stimulation of the respiratory center may occasionally be done, although these methods are not satisfactory for long intervals. Caffeine in doses of 10 mg. per Kg. has been used for this purpose. In those cases in which the respiratory center, while still functioning, is sending very irregular, inadequate impulses to the respiratory muscles, the electro-phrenic respirator is of definite value. Because of the marked irregularity of respiration, use of the tank or other similar respirators will cause aspiration of secretions and pulmonary edema, and hence their use is contraindicated. The principal clinical features of circulatory center involvement are irregular, shallow, rapid pulse, a rising blood pressure with decrease in pulse pressure, a florid dusky-red color, and cherry-red lips. Hyperpyrexia is common. The patient is usually alert, but restless and confused. Treatment is unsatisfactory, although neosynephrine in doses of 0.1 mg. per Kg. subcutaneously has been tried.

Symptoms of encephalitis are exceedingly common in poliomyelitis. They generally appear as apprehension, irritability, restlessness, twitching of facial muscles, and tremors. Insomnia may be marked. The patient may be confused and even comatose. Commonly, encephalitic signs are not due to the virus but to hypoxia and will often disappear after oxygenation takes place. In the pure encephalitic type, sedative drugs may occasionally be used. If a polio patient appears to be in a coma, it is important to be guarded in talking in his presence. The last sense to disappear in these patients is the sense of hearing. A patient who appears to be comatose may still hear what is said and may later be able to tell what was said. Occasionally this can be tested by asking the apparently comatose patient to open his eyes or his mouth and noting his attempt to comply.

In all cases of polio, anoxia must be prevented since this may cause further damage to already damaged anterior horn cells and brain tissue. Therefore, any obstruction to respiration should be removed and oxygen should be administered, usually by nasal catheter. If an adequate airway cannot be maintained, tracheotomy should be performed. This should be carefully planned and deliberate, rather than rushed, if possible. It should be performed preferably over a bronchoscopic or endotracheal tube, the airway thereby being kept clear and pressures equalized. There are several definite indications for tracheotomy[21]:

1. Progressive anoxia, with secretions in the upper airway.
2. Unconsciousness or pronounced restlessness in a patient who does not respond to other treatment in a few minutes.
3. Pronounced restlessness or stupor in a patient in a respirator, even if the paralysis is apparently of the spinal type.
4. Accumulation of fluid in the throat not otherwise certainly taken care of in a patient who requires a respirator.
5. Bilateral spasm or paralysis of vocal cords.
6. Rapidly progressive bulbar symptoms.
7. Grave signs of vasomotor failure.
8. Untrained or inefficient attendants, inadequate equipment, or poor coöperation of the

patient with doubt that the airway will be constantly kept free from secretions.

It should be emphasized that the fluid and electrolyte balance of these patients must be watched. Prevention of respiratory acidosis from accumulation of carbon dioxide is important. Correction of dehydration without causing overhydration and pulmonary edema plus correction of anemia if present will greatly aid the patient. Fluids, especially glucose solution, when given subcutaneously or intramuscularly, aggravate the muscle tightness and soreness which are part of the disease.

Antibiotics are definitely indicated with the following patients[4]:

1. Respiratory difficulty with its danger of pneumonia.
2. Catheterization with its danger of secondary infection.
3. An appreciably elevated leukocyte count, suggesting a secondary bacterial infection.

Repeated catheterization or the use of an indwelling catheter tends to prolong the period of urinary retention and should be avoided if possible. In these cases, furmethide (1.5 to 5 mg. per dose) frequently may be used with good results in nonallergic patients to stimulate the bladder.[22] Furmethide may be given subcutaneously or sublingually. It may increase oropharyngeal secretions and therefore should never be given to patients with respiratory paralysis or bulbar involvement.

The most important aspects of therapy in the acute phase are rest and good nursing care designed to give rest and comfort to the patient. "Any treatment that is not indicated is contraindicated."[3]

TREATMENT OF THE CONVALESCENT STAGE

When the patient's temperature returns to normal there is no abrupt change in therapy.[1] However, more active measures are gradually undertaken to restore muscle function. Since muscles are still sensitive in this early convalescent stage, gentle handling, rest,[23] and the use of hot packs are still indicated. Gentle exercise involving passive motion and later active motion is done several times daily to carry the part out of deformed position and gradually increase the range of motion. The anatomic position should be maintained if possible. A muscle evaluation by a trained physical therapist or orthopedic surgeon should be done at this time and repeated periodically to evaluate the patient's progress and serve as a guide for active exercises. The care of the polio patient in the convalescent stage and later in the chronic stage is primarily a physiotherapeutic and orthopedic problem. Specific measures will not be discussed here. The objects of this orthopedic care may be listed briefly as[24]:

1. Prevention of deformity
2. Protection of paralyzed muscles from overstretching and fatigue
3. Maintenance of circulation in the affected parts
4. Improvement of function by early movement of the joints and muscle training.

EPIDEMIOLOGY

No paper discussing therapy in polio would be complete without some mention of the epidemiology and prevention, some aspects of which we now know.

Sabin[25] has given strong arguments that the primary method of viral spread is via fecal contamination. Other men believe that droplet infection is the primary mode of spread.[26] Obviously this question remains unanswered. Since subclinical immunizations occur during nonepidemic years as well as during epidemics, and since the virus strains definitely will vary in virulence, possibly with increased virulence during epidemics, it is best not to object to any measures designed to decrease the individual's chances of infection during an epidemic on the grounds that it would only delay to a less favorable age the natural immunization process. The large number of unrecognized human carriers is an obstacle to control of spread of this disease, but it is still a sound practice at least to have moderate isolation of the suspected and recognized cases and their familial or other intimate associates in an attempt to decrease the opportunities for infecting others.

During an epidemic, Sabin[25] lists 4 steps that should be taken by individuals to decrease the risk of acquiring the infection.

1. Keep fingers out of mouth and wash hands before eating.

2. Keep flies away from all food and thoroughly wash that which is consumed uncooked.

3. Keep children under 16 out of crowded public wading and swimming pools.

4. Avoid intimate association (shaking hands, kissing, use of common eating utensils and towels, etc.) with members of a family in which a case of polio has occurred within 3 weeks, even though the patient has been removed to a hospital.

Whether this last recommendation is too radical will not be definitely known until more epidemiologic information is available; however, at the present time there is ample evidence to suggest the practicality of these stern measures. In discussing the epidemiology, the question of home care versus hospital treatment again arises. "Hospitalization of the manifest case to control spread is futile."[26] By the time a case is suspected or recognized, the rest of the family and many other intimate contacts are already excreting polio virus, most of them having silent infections. Therein also lies the futility of quarantine. In a true epidemic, for every case diagnosed as polio and admitted to the hospital for that reason, there are 4 or 5 patients that are examined for symptoms simulating polio but who do not have clinical polio. This was noted during the recent epidemic in Los Angeles.[27] Accordingly, the admitting room of Los Angeles County Hospital was provided with equipment and personnel to screen suspected victims and handle emergencies. They admitted those with obvious polio or suspicious symptoms warranting further study. All other patients were sent home or referred to other clinics or private doctors for further diagnosis and treatment.

An interesting, simple method was utilized at the Los Angeles County Hospital to control parental anxiety and save the time of the doctors and nurses. They printed a brochure explaining in detail what was to be done with the polio patient, the laboratory procedures to be performed, the hospital administrative policy, care of contacts at home, quarantine regulations, and other similar useful information. This was given to parents or other relatives when the patient was admitted to the hospital. It proved to be very helpful to the medical staff.

The question of closing schools or camps arises during epidemics. It is agreed that exposure should be minimized as much as possible. However, after the first case of polio appears in a school or camp, the others have probably already been exposed and closure is unnecessary. If an exposed child is brought home from camp, the exertion of traveling may contribute to the onset or severity of symptoms and, if this child were a carrier, he might theoretically spread the disease at home.

Tonsillectomy should certainly be deferred until after the polio season. The incidence of bulbar polio has definitely been shown to be higher following tonsillectomy, and it is thought that this operation may open a portal for spread of the virus to the brain stem.

Suspension of prophylactic immunization during the polio season has been advocated in recent years as a means of preventing the disease. This recommendation was made after many reports appeared in the literature noting the increased incidence of paralysis of the inoculated limb following prophylactic immunization. It has been suggested[28] that this paralysis may be due to the accidental introduction into peripheral nerves of virus from the patient's own skin or from previously contaminated needles or syringes inadequately sterilized, rather than to localization or exacerbation of preëxistent infection. Whether or not these reported cases of post-inoculation poliomyelitis were actually related to the inoculation or purely coincidental still remains to be proved. Meanwhile, the sterilization of syringes and needles by autoclaving or boiling for no less than 20 minutes and the use of strong antiseptics such as merthiolate or iodine on the stopper of vials and on the skin of patients are definitely indicated. Most authorities are in agreement that it is probably best during the poliomyelitis season to defer any unnecessary injections after the first year of life. However, below the age of 1 year, and certainly below the age of 6 months, polio in recognizable form is relatively infrequent, and reports are now appearing urging early immunization prior to the sixth month of life.[29, 30] Since whooping cough is a much greater hazard during infancy than polio, and since any immunity inherited from the mother will have been exhausted by the sixth month, this is probably sound advice. I would like to refer to an editorial[30] in *Minnesota Medicine* of September, 1951, which recommends that routine immunizing procedures be limited to those months in which poliomyelitis is not present in the community in epidemic form. An exception may be made (a) for infants under 6 months of age, because the incidence of poliomyelitis in this age group is very small; (b) in the case of certain prophylactic antigen injections or the injection of other materials for diagnostic or therapeutic purposes which cannot be postponed.

Also, in regard to prevention of the disease, Sabin[31] has reported the presence of an anti-poliomyelitis substance in human milk. This substance has been found to neutralize the Lansing strain of poliomyelitis virus in mouse protection tests. This substance was found in all early breast milk samples and in 80 per cent of milk samples obtained 3 to 10 months after delivery. This substance was found in only 22 per cent of 9 cows tested. Sabin suggests that breast feeding, especially beyond the third month, might be of value in preventing or modifying the disease.

A great deal of research has been done and is being done at the present time concerning the current status of prophylactic immunization in polio. This immunization naturally falls into two categories, active and passive. Passive immunization has been extensively tried in the form of adult human serum and gamma globulin. The rationale for this use is that most adult sera have anti-poliomyelitis neutralizing power, and it was hoped that giving this to children might have a prophylactic effect. However, the possible beneficial effect of therapy has never been adequately measured by a human experiment. It has been pointed out that, "Even if an effective amount of antibody could be given to children when an epidemic seemed imminent, the expected duration of 2 or 3 weeks of such passive immunization would be inadequate to protect children even through the remainder of the epidemic and such immunization would, of course, leave no permanent effect."[32]

Much work is now being done on the subject of active immunization against polio. At one time it was believed that only 1 poliomyelitis virus existed and simple attenuation of this virus was the only problem to be solved before a satisfactory vaccine could be prepared. As a matter of fact, vaccines prepared from this virus, now known to be the Lansing strain of polio virus, are capable of successfully and effectively immunizing monkeys and have been administered to over 12,000 individuals, mostly children, with no severe local or constitutional reactions.[33] Polio did not develop in any child which received the full 3 doses of vaccine. It appeared in 10 who had received only 1 or 2 doses. In over 80 per cent of vaccinated individuals neutralizing antibodies were produced.

This work was reported in 1936. Since that time, 3 distinct immunologic strains of the virus have been isolated with no cross immunity existing between strains. Since it is theoretically possible for a person to suffer from this disease

3 separate times, any vaccine must contain all 3 distinct virus strains. A great deal of research is going on along these lines, but it will probably be a long while before a suitable safe vaccine is prepared. Here are just a few of the many difficulties facing these investigators:

Growth of the 3 virus strains has been quite a problem. One of the strains can be grown in mice; another can now be made to grow in extracts from human sera and human tissue cultures. The third strain, however, can still be kept alive only by inoculation into the central nervous system of monkeys, which are quite expensive. Attenuation of the virus poses another problem. With attenuation the vaccine loses much of its antigenic properties. Yet it is not sensible to vaccinate a large population with unattenuated virus. The incidence of polio is not so great as to warrant such extreme measures. How can we be sure the virus is attenuated? Many of the objections to rabies vaccine are present here. Even if these problems are overcome and a vaccine is available, it will be years before it is completely evaluated. Inoculation of only a small section of the population will not help, since the location of the next epidemic cannot be predicted. Howe[34] stated that "some years ago an ambitious polio vaccination experiment was set up. Some 450 children were vaccinated, and 680 in the same community remained unvaccinated as controls. Unfortunately, those who planned the experiment had failed to reckon with the low paralytic rates which are characteristic for the disease. An epidemic visited their trial area that year, but there was not a single recognized case in either the control or the vaccinated group. In any event, taking the usual rate, only 2 cases would have been expected, a number much too small to convince the statisticians or anyone else. It was calculated in retrospect that it would have been necessary to have from 7,500 to 25,000 children in each of the groups to obtain a significant answer as to the protective power of the vaccine."

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CEREBRAL HEMODYNAMICS IN CEREBRAL ARTERIOVENOUS VASCULAR ANOMALIES*

Report of Two Cases

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THE recent introduction of a quantitative technic for measuring cerebral blood flow and metabolism[1] has made it possible to investigate these functions in patients with vascular anomalies of the brain. We wish to report studies of 2 patients. In the first, the diagnosis of cerebral vascular anomaly had not been suspected prior to the measurement of the cerebral blood flow; in the second, pre- and postoperative studies are presented.

REPORT OF CASES

Case 1. A 69-year-old woman was admitted to Gallinger Municipal Hospital on June 30, 1951 because of lethargy, anorexia, and fever of 2 days' duration. There was a history of right-sided paresis for 1 year. According to the family, the patient had been "going downhill" for the previous 6 months. Further history was unobtainable.

Physical examination revealed a well developed, poorly nourished, elderly woman who looked chronically ill and was confused and lethargic. The blood pressure was 190/120, the temperature 104°F., the pulse rate 100, and the respiratory rate 24. Three-plus sacral and 1-plus ankle edema were noted. The pupils reacted to light and accommodation, and the funduscopic examination revealed grade II arteriosclerotic changes. A few inspiratory crepitant rales were heard over the right lower lung field posteriorly. The heart was enlarged to the anterior axillary line. There was evidence of an old right hemiparesis.

A urinalysis showed only a trace of albumin. The hematocrit was 32, the hemoglobin 10 Gm. per cent, the white cell count and differential within normal limits, and the blood urea nitrogen 34 mg. per cent. A lumbar puncture showed clear fluid under normal pressure. The cell count, serologic examination, and protein were normal. A roentgenogram of the chest showed slight cardiac enlargement.

The patient received 300,000 units of penicillin daily for 6 days. Her temperature dropped to normal within the first 24 hours and remained normal for the remainder of hospitalization. She developed signs of cardiac failure (bilateral basilar pulmonary rales, orthopnea, increased ankle and sacral edema) and was digitalized with fair results. At this time the cerebral blood flow was measured as part of a study of cerebral hemodynamics in arteriosclerosis. The bizarre results, confirmed by a repeated study, suggested a cerebral vascular anomaly, and the patient was examined by the neurology consultant. The results in addition to those noted on admission were a loud systolic bruit over the left carotid artery and a systolic bruit over both mastoid processes, of greater intensity on the left. X-ray films of the skull showed a grossly abnormal enlarged vascular channel in the left temporal region (figure 1). An arteriogram was scheduled, but the patient expired before the procedure could be performed.

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Case 2. A 28-year-old male Navy veteran entered Gallinger Municipal Hospital on November 10, 1952 with the chief complaint of left-sided convulsions. He had been well until 17 months prior to admission, at which time he suddenly developed tingling in the left arm and leg followed by a left-sided Jacksonian seizure. After the convulsion, a left hemiparesis was present. He was hospitalized at another hospital for 7 months, during which time lumbar punctures, electroencephalogram, and pneumoencephalogram were reported to be normal. Function of the left leg was regained in 3 weeks, and 5 weeks elapsed before function returned in the left arm. The patient was placed on dilantin, which he discontinued taking shortly after his discharge from the hospital. He remained asymptomatic until the day prior to admission (10 months after discharge) to Gallinger Municipal Hospital. At this time, he again noted the sudden onset of tingling of the left arm and leg, left-sided abdominal pain, and a right-sided headache. These symptoms were followed in about 10 minutes by a left-sided Jacksonian seizure and loss of consciousness. On regaining consciousness he was unable to move his extremities on the left side.

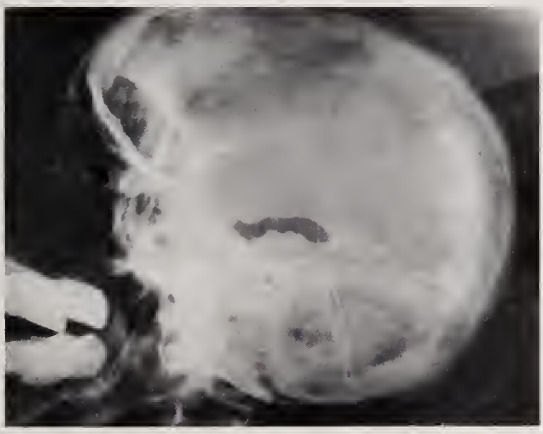

FIG. 1. Case 1. Bone erosion due to an abnormal vascular channel in the left temporal region.

Physical examination revealed a lethargic but oriented and coöperative, well developed, well nourished young man. The blood pressure was 140/96, the temperature 98.6°F., the pulse rate 60, and the respiratory rate 18. Positive physical findings were limited to the neurologic examination, which revealed dilated pupils which reacted to light and accommodation, left facial weakness, central type, left hemiplegia and hyperasthesia, hyperactive deep tendon reflexes on the left, absent abdominal reflexes, and a positive Babinski on the left.

Blood cell count, serologic examination, and urinalysis were normal. Lumbar puncture revealed an initial pressure of 250 mm. water; total protein, serologic examination and cell count were normal. The electroencephalogram was interpreted as being abnormal with slowing in the right parietal lead. X-ray films of the skull were normal. A right carotid arteriogram revealed an arteriovenous fistula in the right parietal region which was fed by 5 or 6 branches of the middle cerebral artery and was drained by a large vein in the superior sagittal sinus (figure 2).

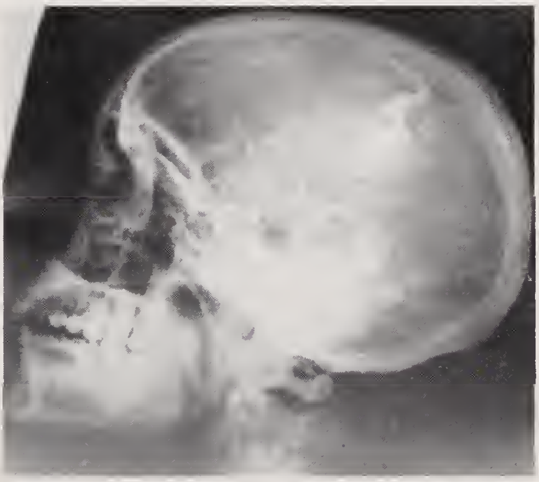

FIG. 2. Case 2. Right carotid arteriogram demonstrating arteriovenous hemangioma in the right parietal region.

A right parietal craniotomy was performed and the arteriovenous hemangioma excised. The patient's postoperative course was uneventful. He was sent to physiotherapy and discharged 6 weeks later with normal function of the left arm and slight residual weakness of the left leg. Studies of cerebral hemodynamics and metabolism were done 1 week before and 2 weeks after craniotomy.

METHOD AND RESULTS

The method used for determination of cerebral hemodynamics and metabolism was Scheinberg and Stead's modification[2] of the nitrous oxide technic devised by Kety and Schmidt.[1] Mean arterial pressure (MAP) was measured by using a damped aneroid manometer attached to a needle in the femoral artery. Gas analyses were done as previously described.[1] Cerebral blood flow (CBF), cerebral oxygen consumption ($CMRO_2$), and cerebral vascular resistance (CVR) are expressed as follows: CBF in c.c.

blood/100 Gm. brain/min.; $CMRO_2$ in c.c. O_2/100 Gm. brain/min.; and CVR in

$$\frac{\text{mm. Hg}}{\text{c.c. blood/100 Gm. brain/min.}}$$

The results of our studies are presented in table 1. In both patients the rate of cerebral blood flow on the side of the lesion was markedly elevated above normal (156 and 106 c.c. blood/100 Gm. brain/min. in patients 1 and 2, respectively). Patient 1 showed a rather marked increase in cerebral blood flow on the contralateral side as well (99 c.c. blood/100 Gm. brain/min.) while patient 2 showed no significant increase on the unaffected side (61 c.c. blood/100 Gm. brain/min.). Likewise, patient 1 showed a significant reduction below normal in cerebral vascular resistance bilaterally (1.2 and 0.9 mm. Hg/c.c. blood/100 Gm. brain/min. unaffected and affected side, respectively; average CVR for older age group, 2.9 mm. Hg/c.c. blood/100 Gm. brain/min.),[3] while a reduction in cerebral vascular resistance in patient 2 was manifest only on the affected side (0.9 and 1.8 mm. Hg/c.c. blood/100 Gm. brain/min., affected and unaffected sides, respectively). In both cases the cerebral oxygen consumption was within normal limits for the age of the patient, while the arterial-cerebral venous oxygen difference was significantly reduced.

TABLE 1

	PATIENT NO. 1 69 YEARS OLD		PATIENT NO. 2 28 YEARS OLD				AVERAGE FOR NORMAL PATIENTS	
			Preoperatively		Postoperatively			
	Ipsolat.	Controlat.	Ipsolat.¶	Controlat.	Ipsolat.	Controlat.	Over 50[3]	Under 50[3]
CBF*	156	99	106	61	50	48	43	54
CVR†	0.9	1.2	0.9	1.8	2.1	2.1	2.9	2.1
CMR‡	2.0	2.2	3.4	2.9	2.9	2.5	2.4	3.5
A-V O_2§	1.50	2.00	3.19	4.75	5.72	5.27	5.5	6.5

* Cerebral blood flow in c.c. blood/100 Gm. brain/min.

† Cerebral vascular resistance in $\frac{\text{mm. Hg}}{\text{c.c. blood/100 Gm. brain/min.}}$

‡ Cerebral metabolic rate in c.c. O_2/100 Gm. brain/min.

§ Arterio-cerebral venous oxygen difference in volumes per cent

¶ Average of 2 observations each

The repetition of the studies done following craniotomy in patient 2 demonstrates that the cerebral blood flow, metabolism, and vascular resistance following surgical removal of the hemangioma had become essentially the same bilaterally. The cerebral blood flow fell to within normal limits (50 and 48 c.c. blood/100 Gm. brain/min.), as did the cerebral vascular resistance (2.1 mm. Hg/c.c. blood/100 Gm. brain/min. bilaterally). The cerebral oxygen consumption was slightly depressed (2.9 and 2.5 c.c. O_2/100 Gm. brain/min.). The latter finding may have been due to residual cerebral edema following surgery. The arterio-cerebral venous oxygen difference increased from 3.2 to 5.5 volumes per cent.

DISCUSSION

The clinical findings of importance for a preoperative diagnosis of cerebral arteriovenous anomaly are, according to Cushing and Bailey,[4] bruit, enlarged tortuous carotid arteries, positive X-ray films of the skull, cutaneous angiomata, progressive paralysis, and/or signs and symptoms of brain tumor, especially epilepsy. The authors emphasize that rarely are all the diagnostic criteria fulfilled and frequently none are present. The first patient manifested 3 of the 6 cardinal findings, the second patient 2. In the first patient these signs were not detected until the abnormal values for cerebral blood flow were noted. In a case recently reported by Shenkin[5] the erroneous diagnosis of idiopathic epilepsy had been made until the abnormal results of studies of cerebral-hemodynamics led to the correct diagnosis of cerebral arteriovenous fistula. Thus the procedure of determination of cerebral blood flow, although primarily a research tool, may also have practical significance.

The signs and symptoms of cerebral vascular anomalies have been said to appear at any age,[4] but the greatest incidence is before or during early adulthood. The oldest patient reported by Cushing and Bailey was 63 years old. In a series of 318 cases in which angiomata were found at autopsy in various organs including the central nervous system, only 42 of the subjects were over 50 years of age.[6] Our first patient represents one of the oldest reported with this type of lesion, whereas the second falls within the classical age distribution.

Angiomata are frequently multiple, and of the arteriovenous anomalies in the brain, 20 to 33 per cent had been accompanied by similar anomalies in other organs.[6] Multiple angiomata were found in case 1 at postmortem examination, 1 of the gastrointestinal tract (esophagus), and 1 of the urinary tract (bladder).

The marked increase in cerebral blood flow seen in our patients and previously reported in 2 cases by Shenkin is believed to be due to 2 factors. First, in a cerebral arteriovenous shunt the cerebral vascular resistance is markedly lowered by the partial elimination of the arteriolar barrier, and there is thus a marked increase of blood flowing through the larger vessels of the part affected. Second, there is an increase in blood flow incident to the increase in cardiac output found in this condition (approximately 50 per cent in the 2 cases reported by Shenkin[5]). This increase in cardiac output tends to maintain a normal blood flow in the partially bypassed tissues.

Gibbs, Lennox and Gibbs[7] in 1945 suggested that a low arteriovenous oxygen difference in the cerebral circulation might indicate the presence of an arteriovenous fistula or similar vascular anomaly. In the present study the arteriovenous oxygen differences were 1.8 and 3.2 volumes per cent, whereas the normal difference is 6 to 7 volumes per cent. Following removal of the lesion in the second patient the arteriovenous oxygen difference rose from 3.2 volumes per cent to 5.5 volumes per cent.

The cerebral metabolic rate remains remarkably fixed despite wide fluctuations in cerebral hemodynamics. Anemia, hyperthyroidism, and hypercapnia all increase the cerebral blood flow without altering the cerebral metabolic rate.[8] Conversely, the use of spinal sympathetic blocks in hypertensive patients reduces the cerebral blood flow and vascular resistance as well as the mean arterial blood pressure, without altering the cerebral metabolic rate.[9] In the patients presented the cerebral oxygen consumption remained within the normal range for their respective age groups, despite the marked aberrations in cerebral hemodynamics. This again points out the well recognized fact that within wide fluctuations of cerebral blood flow the brain can extract oxygen in sufficient amounts to maintain its metabolic requirements.

Although Shenkin et al reported studies of cerebral hemodynamics in 2 similar cases of arteriovenous anomalies, we are unaware of any previous reports in the literature of determination of cerebral blood flow before and after surgery in cases of this type. The data obtained in our second patient demonstrate objectively the benefits to be derived from adequate surgery. The markedly elevated cerebral blood flow and the reduced cerebral vascular resistance both returned to normal, and the cerebral oxygen consumption was found to be slightly below normal. In addition, the discrepancy between the right and left sides disappeared, the values being essentially the same bilaterally following surgery.

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THE USE OF WHOLE BLOOD*

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Historical Aspects

THE association of the necessity of blood with the presence of life has been reflected in the earliest writings of man. Prior to 1900 many writers documented the history of blood administration. Among these, Vary, in an excellent review, recalled the term "lacks blood" as meaning that not only can one not exist without blood, but with a full measure, one may live. Dried blood was perhaps used first in pharmaceutical preparations. Later it was used orally, raw, and usually warm. It is recorded that in the late 1400's a Pope was caused to drink the blood of 3 young boys exsanguinated for the purpose. The criticism which followed this act resulted in the condemnation of those responsible for the treatment. Cardamus, in 1556, wrote: "The hopelessly immoral should be transfused with blood of the strongly moral."

There was perhaps no scientific reason behind the practicability of blood transfusion until Harvey, in 1628, described the circulation of the blood. In 1654 Folli was credited with being the first to perform a transfusion in animals. Denis, in 1667, used lamb's blood for a transfusion in man. He also described the entity now known as hemoglobinuria. The second transfusion of lamb's blood in the same patient resulted in what is known today as an allergic reaction. The third resulted in sudden death, due, no doubt, to an anaphylactic reaction. So many deaths followed the use of animal blood for transfusions in man that it was prohibited by public law for the next 100 years. Blundell, in 1818, utilizing a cannula and a 2-way stopcock, performed the first direct transfusion from man to man. In 1835 Bischoff, using defibrinated blood, performed the first indirect transfusion. In 1875 Landois pointed out the dangers of transfusion between species, reasoning that the difficulty was due to dissolution of the red cells of the one species by the fresh serum of the other. In this same year the first saline infusion was given. This stimulated work on the possible utilization of anticoagulants, but it was not until 1914 that sodium citrate was found to be safe and acceptable.

When one reflects that there was no safe method for transfusion of human blood in man prior to the twentieth century, it is little wonder that recognition of the value of blood has been a very recent development. Prior to 1900 little was actually known concerning the value of blood. It was known to be important for the maintenance of life, and its circulation in the body had been described. Methods of transfusion included the direct method and the use of defibrinated blood in the indirect method. Certain hazards, such as species transfusions, had been recognized. Complications of air embolism had also been warned against.

At the turn of the twentieth century, the therapeutic potentialities of transfusions were greatly stimulated by Landsteiner and others who discovered the iso-agglutinins which placed blood types in 4 classes. About this time, too, the Moss classification was introduced. Further stimulus was brought about by the surgical technics developed by Murphy, Carrell, Crile, Guthrie and others, which made several direct and indirect transfusion methods practical. In

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1914 Kimpton-Brown utilized a paraffinized glass chamber for indirect transfusions. During World War I shock teams of the British Army developed further technics of blood transfusion. Robertson, for example, performed 21 transfusions in a military hospital in 1918. Most transfusions in this period were direct, although a few indirect transfusions using sodium citrated blood were given. In 1928 Yudin utilized cadaver blood, and in 1936 Bruskin and Forberova employed stored placental blood. Prior to this, no attempts were made to store blood for human use. It should also be noted that in the late 1920's the role of the Rh factor was recognized. Since that time more uncommon forms of isoagglutinins have been described. Careful blood typing now makes the transfusion of whole blood possible except in the rare case of the recipient who cannot tolerate any of the donor's serum. This obstacle, however, has been overcome by washing the cells of the donor in a saline solution to infuse serum-free red cells.

Indications

Indications for the use of whole blood are now well defined. Foremost among these is hemorrhage, whether due to trauma, operative procedures, or other causes. Anemic states require correction by administration of blood before operation. It is well recognized that greater amounts of blood are lost during extensive modern surgical procedures than was formerly surmised, and that the blood lost during the operation should be replaced at the time. The resuscitative power of blood, given postoperatively, has served to prevent many deaths. Certain purpuric conditions, notably purpura hemorrhagica, demand administration of whole blood. The administering of whole blood for hemophilia is a necessity. In jaundice, the use of whole blood has been modified somewhat since the recognition of the role of vitamin K. The use of whole blood in certain of the blood dyscrasias may be essential. In leukemic states the practice of blood replacement has neither met with favor nor has it prolonged life to an extent to justify the procedure.

Reduction in blood volume in patients who have suffered weight loss is an important indication for the administration of blood, especially prior to surgery.

Shock

Notable advances were made in the field of experimental shock in the period from 1914 to 1940. Mann, in 1914, observed that only 40 per cent of the estimated blood volume of experimental animals could be recovered after the animals were thrown into a state of irreversible shock. Evidence that a marked depletion in blood volume occurred was brought forcibly to our attention in the mid-thirties by the reports of Blalock, and of Parsons and Phemister. These workers demonstrated that a reduction of the blood volume equal to 3.5 to 5.5 per cent of the total weight of the animal resulted in irreversible shock. This reduction could be brought about either by the withdrawal of whole blood or by plasma loss in burns, crush injuries, severe cold injuries, or extensive trauma to the bowel.

Although it was demonstrated in the experimental laboratory that reduction of blood volume by 30 to 50 per cent could explain deep shock states, very little in the way of practical application occurred prior to the onset of World War II. This is typical of the lag between the discovery of a principle and its clinical application. As soon as it was recognized that large amounts of blood would be required, much was accomplished prior to World War II, not only in improvements in methods for storage of whole blood, but also in the preservation and storage of plasma and other blood fractions. Substitutes of animal origin, such as bovine serum, were investigated. Vegetable materials, such as pectin from citrus fruits, were tested. Though World War II stimulated much research in the field of plasma expanders, there still is no substitute for whole blood. Except for the storage of red blood cells in saline solution, no modification has been offered which permits the administration of these cells except in the form of whole blood. It must be realized that blood is an unstable biologic product and that the period of preservation is limited. With present methods whole blood can be safely preserved for approximately 21 days. Recent investigations, however, indicate that by quick freezing in a glycerin solution to ensure viability of cells when reconstituted, red blood cells may be preserved for a longer time. The mass application of this new principle, however, is yet to be solved.

Liquid components, separated from the red blood cells, have been preserved for many years. Unfortunately, serum hepatitis has become a real hazard, especially when plasma pooled from many donors is employed. Overcoming the hazard of transmission of disease with infusion of plasma and other fractions is still a problem.

Many lessons have been learned from World War II and the Korean hostilities. The clinician of today is fully aware that many pints of blood are often required to resuscitate patients in profound circulatory collapse. Blood is the most important single commodity in war surgery. We recognize that in trauma alone, when red blood cells have not been lost, reduction in plasma volume brings about profound and irreversible shock states, and the administration of plasma alone in such cases is lifesaving. In a great number of the severely wounded, whole blood transfusion is indispensable. At present, facilities for blood storage at the front lines are impractical. Since it is impossible under such conditions to insure an adequate supply of whole blood at the first medical stations where wounded are treated, plasma must be relied upon. Whole blood, however, is readily available in the stations where definitive treatment is carried out. Practically all transfusions are given by the indirect method.

The use of a new and important development, the plastic bag, in lieu of the glass container, eliminates the breakage factor, reduces shipping space, and minimizes the hazard of air embolism. Several such bags can be carried under the outer clothing of the medical aid man, thus preventing freezing. Pressure transfusions are facilitated by placing the bag under the patient, or applying a blood pressure cuff about the bag. The most common preservative is sodium citrate or a modification known as ACD solution.

A simple and practical method of determining total blood volume is still lacking. Present technics are time-consuming and cannot be repeated at short intervals. Further, there is no laboratory technic by which one can estimate the volume of the highly labile vascular tree. The extent to which vasoconstriction compensates for sudden blood volume depletion cannot be measured. The degree of vasodilatation, due either to extraneous stimuli or to drug action, also cannot be estimated. Recognizing, then, that neither the volume of blood present in an injured individual nor the state of tonicity of his vascular tree is known, we are faced with the problem of determining, on an empirical basis, the amount of blood which is to be administered. One practical solution in profound shock is the refilling of the arterial tree by intra-arterial transfusion. Filling of the arterial tree, sufficient to exert pressure against the elastic walls of the great vessels, brings about perfusion of the coronary vessels, maintains an adequate circulation to important cerebral centers, and saves life.

At this stage it is well to reflect upon advances made in the administration of whole blood, cells, plasma, concentrates of plasma, and plasma substitutes, and the refinement in methods of estimating blood volume. We must develop a method which can be quickly and repeatedly applied during the critical period when blood replacement is necessary. Jacobson has demonstrated that animals can withstand excessive exposure to irradiation if the spleen is shielded by lead plates.

The utilization of blood by-products is a challenge. Once plasma has been separated from red blood cells, the cells are no longer useful. Though hematin may be administered by mouth, there is as yet no clear-cut indication for the utilization of the red blood cells except in the form of washed cells. The utilization of the cells is limited by time. It is therefore necessary to know whether this biologic substance can be preserved for an indefinite period. Further investigations are indicated, particularly in storage in the frozen condition. Further advances are necessary in the development of blood plasma substitutes. Although many substitutes have been developed, there is none which is perfectly safe. Although a certain amount of preliminary work has been done, investigations into the inactivation of the Rh factor are in order.

When considering the use of whole blood, it is well to review the hazards involved. Gross incompatibility is always a great danger. The human factor in the laboratory must be taken into consideration. Allergic reaction is another hazard. It has been found, however, that adding certain of the antihistaminics to blood has resulted in a marked lowering of these allergic reactions. Another important consideration is that of iron overload, transfusion hemosiderosis. In chronic blood diseases patients can often be kept alive for years with repeated transfusions, but these transfusions may number in the hundreds. The body cannot eliminate iron administered by vein. One pint of blood contains 250 mg. of iron. Sixteen transfusions contain 4 Gm. of iron, an amount equal to that normally present in an adult. Air embolism is another hazard of pressure transfusions. Whenever pressure is exerted over blood which is being administered by vein or by artery, constant attendance is mandatory. When blood is administered by artery under pressure, there is always the danger of gangrene in the extremity distal to the point of administration. The reason for this is perhaps undetermined, but it is a known fact that a severe degree of vasospasm may occur in large vessels. Resuscitation by the arterial route, therefore, should be prompt, but it should be completed by the intravenous method as soon as the blood pressure has become stabilized.

Nelson has reported that bacterial contamination of blood causes shock states in experimental animals. This has introduced an important factor in experimental studies and may be important in the transfusion of humans. Fine is critically analyzing the role of contaminated blood in the experimental laboratory. Hemolysis in stored blood may be dangerous. The problem of lower nephron nephrosis is not confined to those patients suffering prolonged hypotension, but may also occur in those receiving incompatible or hemolyzed blood. Another factor is that of overtransfusion. It is essential that serial hematocrit determinations be conducted when a large quantity of blood is required. Should overtransfusion be recognized, prompt withdrawal of blood is essential.

Transmission of diseases such as syphilis, malaria, and hepatitis is a never-ending problem. Many patients contribute to blood banks during early stages of hepatitis when the presence of this disease cannot be determined by laboratory tests. When the serum of such patients is pooled with that of many others, the entire lot will be infected.

SUMMARY

The following points should be emphasized: Blood is an unstable biologic substance. There is no known method by which it can be preserved over prolonged periods. Removal of the cells permits preservation of the plasma for years. There are no substitutes available for red blood cells. Substitutes are available for plasma, but many problems are yet to be solved. The utilization of plastic bags not only serves to overcome some of the transportation problems, but also prevents the introduction of air during transfusion. The most important single commodity in this world of trauma is whole blood, and the availability of this vital substance is dependent upon a well informed public.

THE USE AND ABUSE OF SOME NEW DRUGS*

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ANTIBIOTICS

COLONEL PULASKI:

Q. *Generally speaking, what are the antimicrobial spectra of the commonly used antibiotics?*

A. Penicillin is usually effective against gram-positive microörganisms, including the staphylococci, streptococci, pneumococci, anthrax bacilli, *Treponema pallida*, *Actinomyces israeli*, and the anaerobic spore-forming bacilli of the gas gangrene group. Tyrothricin, bacitracin, aureomycin, chloramphenicol, and terramycin also are effective against most of these organisms. Streptomycin inhibits staphylococci, streptococci, anthrax and actinomyces organisms, but is clinically ineffective against *Treponema pallida* and the clostridia.

Streptomycin also inhibits many gram-negative bacilli and tubercle bacilli, which are generally uninfluenced by penicillin. Aureomycin, chloramphenicol and terramycin are likewise effective against many gram-negative bacilli. Terramycin is active against *M. tuberculosis*, but less so than streptomycin. Aureomycin, chloramphenicol and terramycin inhibit many of the gram-positive bacteria in the penicillin spectrum.

Polymyxin is unique in its high degree of activity against *Pseudomonas aeruginosa*, some strains of which are also inhibited by streptomycin, terramycin and chloramphenicol. Neomycin has the same spectrum as streptomycin except for weak action on the streptococci.

Aureomycin, chloramphenicol and terramycin are clinically effective against rickettsial infections and a few large viral infections. They are useful in amebic colitis, as are also bacitracin and neomycin. Terramycin apparently is effective in enterobiasis (pinworm infestation).

Q. *What is the trend of occurrence of resistant organisms to the various antibiotics?*

A. Resistance can be acquired by most, if not all, species of bacteria, but more rapidly by some than others in the course of antibiotic therapy. With the exception of streptomycin and possibly neomycin, resistance to the antibiotics presently available develops slowly. In the case of streptomycin it may increase suddenly to complete fastness. Staphylococcal resistance to penicillin in hospital infections has increased to an incidence of about 50 per cent. Most *Streptococcus faecalis* strains are primarily resistant. Penicillin-resistance is still encountered only occasionally in clostridial and pneumococcal infections. In our own survey for 1951, 82 per cent of Pseudomonas strains, 72 per cent of Para colon strains, 50 per cent of Proteus and Aerobacter, and 20 per cent of *E. coli* strains isolated from infectious processes were streptomycin-resistant. Bacterial resistance to aureomycin, chloramphenicol and terramycin was observed especially among gram-negative bacilli.

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* These questions and answers were part of a panel discussion on this subject, with Dr. Wallace M. Yater as Moderator, presented at the Midwinter Seminar of the Medical Society of the District of Columbia, February 21, 1952.

Q. *What is the clinical significance of cross resistance to antibiotics?*

A. Recent evidence indicates that if bacteria exposed to aureomycin become resistant to it, a parallel resistance of the organisms develops to terramycin and vice versa. Some of these organisms simultaneously develop increased resistance to chloramphenicol, whereas such is not the case with other strains. Similarly, strains resistant to neomycin sometimes increase markedly in resistance to streptomycin. For resistant strains, therefore, the number of alternative antibiotics is not always as large as appears on the surface. This is a situation which furnishes another potent reason for employing antibiotics only on established indications.

Q. *What has been the experience with avoiding the problem of streptomycin resistance by using it simultaneously with another antibiotic?*

A. Streptomycin sensitivity of tubercle bacilli in tuberculotherapy may be retained for much longer periods of time when the antibiotic is given in combination with para-aminosalicylic acid (PAS). This combination extends considerably the effectiveness of streptomycin therapy in tuberculosis. Attempts to prevent or delay emergence of resistant strains during streptomycin therapy with combination therapy in urinary tract infections and common gram-negative bacillary infections have been much less successful.

Q. *What is the value of antibiotic sensitivity tests? Under what circumstances are they used as a guide to therapy?*

A. Experience has shown that strains of certain species, such as pneumococci, gonococci, or group A streptococci, are more or less uniformly susceptible to any given antibiotic, and antibiotic sensitivity tests usually are unnecessary for therapy of infections caused by them. On the other hand, staphylococci and enterococci may vary widely in their susceptibility to any drug. Furthermore, individual strains within species of gram-negative bacilli may show wide variations in susceptibility to the same antibiotic, and it cannot be taken for granted that the initial susceptibility to an antibiotic will remain unchanged throughout treatment. For these reasons it is wise to employ susceptibility tests:

1. In all infections in which the etiologic diagnosis is in doubt.
2. In all severe and fulminating infections.
3. In all chronic and relapsing infections.
4. In all infections which have been diagnosed clinically but in which failure of, or inadequate response to therapy suggests a growing drug resistance or an actual change in the type of causative organism.
5. In all staphylococcal and enterococcal infections.
6. In all gram-negative bacillary and mycobacterial (tuberculous) infections.

Multiple culture sensitivity testing furnishes information on (1) whether a given culture is susceptible or resistant to the antibiotics tested, and (2) available alternative agents in the event organisms are resistant to the antibiotic of first choice. These tests, of course, are of no value in infections caused by microörganisms which cannot be cultured with ease.

Q. *What are the therapeutic advantages and disadvantages of combinations of antibiotics?*

A. The theoretical advantages of combined therapy are:

1. Resistant variants in an infecting microbial population will be inhibited by the other drug employed with the agent of choice.
2. In mixed infections, such as peritonitis, no single drug is effective against all the organisms present.
3. Presently available antibiotics do not meet satisfactorily the problems of the clinical management of infections caused by Proteus, Pseudomonas and other organisms.

The reasoning is sound theoretically, but the evidence for combined therapy is somewhat conflicting. Two or more drugs acting simultaneously may be synergistic, antagonistic, additive, or without any effect at all on one another. Examples of true synergistic action between antibiotics are limited. With many combinations the effects are essentially additive. There is clinical evidence that the combination of penicillin and streptomycin is effective in subacute bacterial endocarditis caused by enterococci. In brucellosis, streptomycin is thought to enhance the effect of broad-spectrum antibiotics, whereas in tuberculosis para-aminosalicylic acid is thought to enhance the effect of streptomycin as well as to solve, to a certain extent, the problem of streptomycin resistance. The combined use of penicillin and streptomycin has been widely advocated, with the idea of combining their properties to secure a broader antibacterial spectrum in such mixed infections as peritonitis, empyema, etc. On the other hand, there is no clinical or experimental evidence to support the thesis of beneficial effects from other combinations of antibiotics now possible with the large number of agents currently available.

It would be bad enough, in terms of wasted effort, expense, and annoyance to the patient, if certain combinations merely had no curative value. Such therapy may actually do harm. Antagonistic effects have been demonstrated when chloramphenicol and penicillin, and others, have been used jointly. It is clear, therefore, that combined therapy should be instituted only (1) when the proper indications for its use exist, and (2) when it is clear that the drugs selected are not antagonistic to each other. Combined or "shotgun therapy" is a lame excuse for establishing a proper etiologic diagnosis of an infection.

Q. *In regards to streptomycin and dihydrostreptomycin, is one more toxic than the other?*

A. In the lower dosage range, the toxicity of streptomycin is no greater than dihydrostreptomycin. In general, neither drug is more toxic to the auditory function of the eighth nerve than is the other drug. Occasionally a patient who is hypersensitive to streptomycin may tolerate dihydrostreptomycin without difficulty. Both drugs, dose for dose, have the same therapeutic potentiality.

Q. *How much of a problem is diarrhea and pruritus ani with respect to the use of aureomycin, terramycin and chloramphenicol?*

A. Manheim recently reported 100 consecutive cases of an anorectal symptom-complex which followed the administration of aureomycin in 69 cases, terramycin in 21, chloramphenicol in 4, and combinations of these antibiotics in the remaining cases. The symptom pattern was usually the same, consisting of perianal itching, pain, a burning sensation, and bleeding upon defecation, sometimes associated with diarrhea, which was severe. The severity of the symptoms was not related to the amount of drug taken or the period of time covered. The condition was extremely resistant to treatment, sometimes lasting for 6 to 8 months. The majority of patients were given the antibiotics for colds and upper respiratory infections, in which, as Manheim notes, they are of questionable value.

Q. *Are monilial infections a real problem in antibiotic therapy?*

A. Numerous reports have appeared in the literature describing the development of moniliasis following antibiotic therapy. In April 1951 the Council on Pharmacy and Chemistry of the American Medical Association decided that a warning statement should be added to the label of chloramphenicol, aureomycin and terramycin. This report of the Council pointed out that the overgrowth of monilia and other yeast-like organisms following the administration of antibiotics occurs most frequently in the bowel and is of slight importance; however, it emphasized that deaths from pulmonary complications can occur following therapy with these antibiotics.

Q. *In what conditions are antibiotics useful for prophylaxis of infections?*

A. Controlled studies proving the value of prophylactic use of antibiotics against infection are few, and precise definition often is lacking. "Routine" prophylaxis is hardly justified in those conditions in which there is no evidence that reduction in the incidence of infection will be accomplished. The following are suggested uses for protection against impending infection, subject, of course, to clinical judgment and appraisal of the individual case:

Medical: Penicillin to decrease the incidence of gonorrhea or syphilis in those exposed to these infections and in closed communities to prevent meningococcal infections; penicillin or aureomycin in cases of agranulocytosis, and in the prophylaxis of puerperal infection or of subacute bacterial endocarditis in rheumatic subjects before and after any operative procedure around the nose and throat.

Surgical: Where infection is a risk, e.g., in "cataract" operations; in the contaminated open wound or thermal burn; in resection of the lung for suppurative disease; in surgical tuberculosis; in colon resection; and in patients with diabetes when infection is a threat.

Q. *What penicillin preparations do you recommend for "routine" use?*

A. My own preference is for procaine penicillin in oil which contains, in addition, 100,000 units of crystalline sodium or potassium penicillin for each 300,000 units of procaine penicillin. Following intramuscular injection this preparation affords not only prolonged penicillin activity, but in addition, because of the presence of crystalline sodium or potassium penicillin G, an immediate high or peak concentration is obtained in the blood. One or more injections a day of this preparation are adequate for treatment of many penicillin-susceptible infections.

Q. *What are the indications for the penicillin esters, Dicillin and Compenamine?*

A. The indications are the same as for procaine penicillin in oil preparations, that is, for penicillin-susceptible infections in which a sustained, low blood level of penicillin is adequate.

Q. *What therapeutic effects differentiate aureomycin, chloramphenicol and terramycin?*

A. Chloramphenicol is the only effective therapeutic agent in typhoid fever. Proteus and Pseudomonas strains are sometimes susceptible to chloramphenicol but are generally refractory to aureomycin and terramycin. Terramycin and aureomycin therapy in amebic colitis is said to be more effective than chloramphenicol therapy. Chloramphenicol therapy has a lesser incidence of untoward gastrointestinal disturbances than aureomycin or terramycin therapy. We have found a 25 per cent incidence of terramycin-resistant strains of staphylococci before treatment with this drug. Terramycin is the only antibiotic thus far reported to be effective in treatment of enterobiasis (pinworm infestation).

Q. *What is the status of neomycin and bacitracin in antibiotic therapy?*

A. Neomycin is bacteriostatic and bactericidal in vitro against a wide variety of gram-negative and gram-positive bacteria, including streptomycin-resistant tubercle bacilli. The streptococci are relatively refractory to its action. Gram-negative bacilli may be made to increase in resistance during subcultures in this agent. Neomycin is now being employed topically in various types of skin infections, particularly in patients who are sensitive to the other antibiotics. In a total of 869 such infections, Kile and his associates found only 1 instance of serious sensitivity. Patients who did not respond were chiefly those with hemolytic streptococcal and Pseudomonas infections. Neomycin can be used safely by the oral route to accomplish suppression of gastrointestinal organisms, since only trace amounts are absorbed. The daily dosage is 0.1 Gm. per Kg. of body weight divided into 6 portions on a 4-hour schedule. A 3-day preoperative preparation has proved satisfactory. The oral route seems effective in treating amebic colitis. When given parenterally, neomycin has nephrotoxic and autotoxic potentialities, for which reason it should not be so employed except when no other effective antibiotic is available and renal function tests reveal no insufficiency. In experimental tuberculosis neomycin is less effective than streptomycin.

Bacitracin duplicates the antibacterial spectrum of penicillin, in combination with which it shows synergistic action in vitro. It is a valuable local agent in coccal infections, and it has practically no allergenic action. No toxicity has been observed following oral or topical use. Indications for oral treatment are primarily ulcerations and granulomas of the colon caused by *Endamoeba histolytica*. Meleney states bacitracin is safe and effective when used intrathecally for bacitracin-susceptible staphylococcal meningitis. Preparations presently available may be given in doses up to 80,000 units by the parenteral route, but repeated blood chemical determinations are necessary to detect possible renal damage.

Q. *What antibiotics are most useful against bacillary dysentery, amebic dysentery, acute peritonitis, perforated peptic ulcer?*

A. At a recent conference held under the auspices of the New York Academy of Sciences, a study of 1,600 cases of acute bacillary dysentery among prisoners of war held in South Korea was described by Hardy, Mason and Martin. It was found that terramycin, aureomycin and chloramphenicol were each effective in promptly relieving symptoms; 4 Gm. of the drugs (initial 2 Gm. and 1 Gm. 12 and 24 hours thereafter) was sufficient for treatment of Shigella infections. A high incidence of sulfadiazine-resistant strains was encountered.

Experiences with acute amebic dysentery among these prisoners was reported by W. W. Frye. In comparing immediate and late results with the 3 broad-spectrum antibiotics (2 Gm., then 0.5 Gm. every 6 hours for 10 days), terramycin was said to be the most effective.

In the treatment of acute peritonitis of intestinal origin, aureomycin, terramycin and combination penicillin-streptomycin therapy are useful and effective adjuvants. Aureomycin and terramycin are given by the intravenous route (0.5 to 1.0 Gm. every 12 hours for 2 to 4 days), followed by oral use in doses of 0.5 Gm. every 6 hours for 5 to 10 days. Penicillin, 1,000,000 units, and streptomycin, 1 Gm. given intravenously every 12 hours are also effective. These regimens may be used successively in the event of failure of one or the other. The largest number of excellent responses are achieved in spreading peritonitis, while the incidence of dramatic results is smaller in localizing and localized infections.

As an adjuvant to the therapy of perforated peptic ulcer, Seeley of Walter Reed Army Hospital prefers a combination of penicillin (1,000,000 units) and streptomycin (1 Gm.) with or without sodium sulfadiazine, given by slow intravenous drip every 12 hours until peritoneal irritation is absent for 24 hours. In 106 consecutive patients, death occurred in only 1 case, and that was caused by myocardial failure.

Q. *How do you prepare the large bowel preoperatively for resection?*

A. The effectiveness of any agent in bowel sterilization is dependent on several factors: (1) the antibacterial spectrum of the drugs; (2) the dosage employed; (3) the duration of its administration required for optimal bacteriostasis; (4) the rapidity of the emergence of drug-fast bacteria; (5) the quantity of bacteria-laden residue in the bowel; and (6) the presence of obstruction, abscesses, sinus tracts and non-sterilizable surfaces.

For some time sulfasuxidine and sulfathaladine in doses of 0.25 to 0.1 Gm. per Kg. per day for 5 days have been demonstrated to be effective drugs in reducing the fecal bacterial flora except for enterococci, Pseudomonas and Proteus.

Their advantages lie in their being poorly absorbed from the intestinal lumen and the low incidence of untoward effects. Aureomycin and terramycin, in doses of 3 to 4 grams a day, are also effective intestinal antiseptics; they have the advantage of simultaneously producing high intestinal and blood serum levels. A possible disadvantage is rapid overgrowth with Proteus and resistant micrococci. Neomycin, recently introduced, is a remarkably effective intestinal antiseptic. Like streptomycin, it is unabsorbed from the gastrointestinal tract, and toxicity from absorption into the circulation is unlikely. Its chief advantage is rapidity of action, which is sustained.

The regimen of preparing the patient for bowel surgery as employed by us is as follows: Three days prior to operation a soapsuds enema is given the patient to evacuate the lower bowel. The same morning the patient is given 1 ounce of Fleet's phosphate of soda. In the afternoon the patient is given terramycin or neomycin in the aforementioned daily doses, usually 2 Gm. stat and the remainder 8 hours later. Administration of these drugs with milk or sodium bicarbonate effectively minimizes nausea and vomiting. The following morning a second dose of 1 ounce of Fleet's phosphate of soda is given and the antibiotic also administered. The day of surgery both the antibiotic and the Fleet's phosphate of soda are omitted. It is important to bear in mind that intestinal antiseptics have their most pronounced action when they are operative in a bowel cleansed of formed fecal material; that is, they are most effective when used as adjuncts to mechanical cleansing of the colon.

NEUROLOGY

DR. FORSTER:

Q. *What drugs are best in the treatment of petit mal epilepsy?*

A. Petit mal epilepsy consists of the short and minor staring attacks and myoclonic jerks. In order to make the proper diagnosis, it is necessary that it also be demonstrated that these patients have bilaterally synchronous 3 per second wave and spike dysrhythmia in the EEG. When these criteria of petit mal epilepsy are met, the best drugs are the oxazolidinediones and phenobarbital. The two members of the oxazolidinedione family now in common usage are tridione and paradione. Tridione is available in 0.3 Gm. white capsule with a distinct flavor of cocoanut; paradione is in a round red pearl also containing 0.3 Gm. of the active ingredient. The dosage of these preparations is from 0.3 Gm. to 2.7 Gm. per day. Tridione is a little more effective than paradione in treating petit mal epilepsy, but paradione is a little less toxic than tridione. Either of these preparations may be used first if it is efficacious and satisfactory. If it is not efficacious and the top total dose has been reached, namely, 2.7 Gm. per day, a gradual substitution of the other drug can be made. For example, a patient on 2.7 Gm. of tridione who is not effectively handled can then be given 2.4 Gm. of tridione and 0.3 Gm. of paradione every 3 or 4 days by substituting another 0.3 Gm. of paradione for 0.3 Gm. of tridione until either effective combination of the two medications is reached or the complete transposal to tridione can be accomplished. With both tridione and paradione some phenobarbital therapy should also be used in order to prevent or minimize the possibility of increase in major seizures.

Q. *What drugs are best in the treatment of psychomotor epilepsy?*

A. Psychomotor epilepsy consists of minor attacks in which the patient carries out some purposeful but irrelevant motor or psychic activity in which he has an amnesia. These attacks are frequently of temporal origin. If the therapy to be followed is medical in these cases, the medical regimen should consist, first, of the use of dilantin sodium and phenobarbital. Two thirds of the cases of psychomotor epilepsy can be controlled by the use of sufficiently large doses of dilantin and phenobarbital. The dose of dilantin is from 0.3 Gm. to 0.7 Gm. per day in an adult and the dose of phenobarbital from 0.05 Gm. to 0.3 Gm. The aim, of course, is to control the seizures with the least medication necessary. In the event that dilantin and phenobarbital therapy are unsuccessful, mesantoin can be instituted either as adjuvant to the dilantin-phenobarbital or separately. However, when the hydantoinate-phenobarbital groups are ineffective in controlling the seizures, the next medical regimen is the use of phenurone or phenascemide. This medication is a new drug made by Abbott containing 0.5 Gm. in each large, white scored tablet. The dosage of this is 1.5 to 3.5 Gm. per day. This medication has particular complications. About 20 per cent of the patients receiving this therapy develop psychoses, usually depressions, and any patient who has had a previous psychiatric disorder is not a suitable candidate for this medication. In addition to the psychotic symptoms, this drug may also produce a hepatitis or blood dyscrasia and in rare cases complete analgesia.

Q. *What precautions should be taken in following patients on new anticonvulsant drugs?*

A. All new patients on new anticonvulsant drugs should have their blood counts checked routinely at least once a month. The urine can be checked for urobilinogen. The development of jaundice, leukopenia, and anemia are all indications of cessation of therapy with the new drug.

Q. *Are 10,000,000 units of penicillin adequate in the treatment of central nervous system syphilis?*

A. No. It has been shown that spirochetes may survive in the brain of a paretic after the administration of this amount. The optimum dose is between 12,500,000 and 15,000,000 units of penicillin.

Q. *What is the present status of stellate ganglion block in the treatment of cerebral thrombosis?*

A. Stellate ganglion block is still in the experimental stage in regard to treatment of cerebral thrombosis. There is no direct evidence that the cerebral blood flow is increased by this procedure.

Q. *Which of the newer drugs is most efficacious in treating Parkinsonism?*

A. The most efficacious of the newer drugs in the treatment of Parkinsonism is artane. The pyribenzamine, parpanit and other drugs have not proven themselves to be very satisfactory.

Q. *What are the indications for DFP and TEP in the treatment of myasthenia gravis?*

A. DFP and TEP should be considered as experimental drugs for the treatment of myasthenia gravis. Despite the fact that these were first discovered as cholinesterase destroyers, these medications are too dangerous to supplant the prostigmin treatment of myasthenia gravis. Moreover, they do not have the added cholinergic activity that prostigmin has.

Q. *What is the present status of ACTH therapy in myasthenia gravis?*

A. ACTH therapy in myasthenia gravis should be considered in the experimental stage. It is a dangerous type of medication in a patient who is in a severe exacerbation of the disease. There is no long-term recovery from the use of ACTH in myasthenia gravis. In selected cases, however, a course of ACTH according to some may make a patient more amenable to prostigmin therapy after the cessation of the ACTH therapy.

Q. *Is there any indication for the use of BAL in polyneuritides?*

A. BAL is of value in treating the polyneuritides due to heavy metals and may, according to Karnosh, be of some value in the therapy of diabetic neuritis, particularly in patients who have been treated with protamine zinc insulin.

Q. *What are the indications for the use of antabuse?*

A. Antabuse can be used in the treatment of alcoholism only as adjuvant therapy. It does not take the place of psychotherapy, nor does it touch the fundamental problems of the patient. This conditioned reflex kind of treatment, it must be realized, is only a means and not the goal itself.

Q. *Are there any dangers in the use of antabuse?*

A. Yes, there have been reported instances of myocardial infarction occurring in patients taking antabuse who imbibed and who had a critical drop in blood pressure. There have also been cerebrovascular accidents developed by the same mechanism, and there are several instances of convulsive seizures occurring in patients taking antabuse.

Q. *Is caffeine effective as an adjuvant in the treatment of migraine?*

A. Yes. It can be administered separately from ergot and is particularly useful in those patients who have migraine headaches more frequently than ergotamine preparations can be safely administered. It can be administered concurrently with ergotamine in the preparation Cafergot.

Q. *What are the indications for the use of phenacemide (phenurone)?*

A. Phenurone is particularly indicated in the treatment of psychomotor epilepsy if the safer medications of dilantin and phenobarbital have proven ineffectual. According to Levin, there is also a role for phenurone in the alleviation of minor seizures in children, particularly those children who show severe damage of the brain which is progressive in nature. Levin believes that not only may the seizures be controlled but that the unremitting course of the disease may also be checked.

Q. *Does bulgarian belladonna have any value over the other belladonna preparations in the treatment of Parksinsonism?*

A. No. The chief function of the bulgarian belladonna treatment lies in the high dosages employed.

Q. *Is there any effective drug therapy in multiple sclerosis at the present time?*

A. There is still no specific drug therapy. The etiology of this disease is still unknown, and a well established therapy awaits the solving of the etiology. Various methods of increasing blood flow and decreasing coagulability in the blood have not given adequate evidence of therapeutic efficacy.

Pulmonary Diseases

Dr. Trenis:

Q. *How do you determine the selection of drugs for the treatment of pneumonia?*

A. This is determined chiefly through knowing or suspecting the causative agent. If it appears to be a pneumococcal pneumonia, penicillin is the agent of choice and treatment should be started immediately, preferably after blood and sputum cultures are obtained. If the response is not good, the drug should be given in larger amounts. The broad-spectrum antibiotics are also satisfactory drugs and are employed in pneumococcal pneumonia. The results obtained with sulfonamide therapy are not as good as those obtained with the antibiotics.

For streptococcal pneumonia the treatment is similar to that for pneumococcal pneumonia. Staphylococcal pneumonia may require larger amounts of the antibiotics.

Pneumonia due to *Hemophilus influenzae* is best treated by one of the broad-spectrum antibiotics or a combination of streptomycin and sulfadiazine.

Friedländer's pneumonia does not respond to the use of penicillin, but streptomycin, particularly in combination with sulfadiazine, is helpful.

The broad-spectrum antibiotics alone or combined with sulfadiazine may also be used. If the response to the broad-spectrum antibiotics is not entirely satisfactory, streptomycin should be added or substituted for them. This type of pneumonia may be very severe and even fatal in a short period of time; therefore, it is important to treat such pneumonia early and adequately. As in all types of pneumonia, laboratory examinations to determine the sensitivity of the organism to the drug may be helpful in selecting one.

Atypical pneumonia or pneumonias, believed to be due to virus infections, rarely respond to penicillin. The broad-spectrum antibiotics may have a beneficial influence on the course of the disease.

Q. *What drugs are useful in the control of pleural pain?*

A. An intercostal nerve block between the area of pain and the vertebral column with the injection of 2 to 4 c.c. of 2 per cent procaine solution may be helpful for a few hours. It may be necessary to inject several intercostal nerves. The needle is inserted at the lower border of a rib and just under it. The relief from pain is often dramatic. If this is not successful or if it cannot be carried out, then codeine, 30 to 60 mg. ($\frac{1}{2}$ to 1 grain) or demerol, 50 to 100 mg., or morphine, 8 to 10 mg. ($\frac{1}{8}$ to $\frac{1}{6}$ grain), may be given. Morphine should be used with caution, and depression of respiration guarded against.

Q. *What drugs are recommended in the treatment of tuberculosis?*

A. Combined with measures proven to be beneficial, such as bed rest and, if indicated, collapse and excisional therapy, streptomycin is an aid in the over-all management of tuberculosis. This drug should be given in combination with para-aminosalicylic acid (PAS), because the combination of drugs retards the development of resistance of the organisms to streptomycin. Except for certain more severe types of tuberculosis, such as miliary and meningeal, streptomycin is usually given in doses of 1 Gm. subcutaneously every third day and PAS daily in the amount of 10 to 12 Gm. The streptomycin drugs at times cause damage to the eighth cranial nerve manifested by auditory disturbances or disturbances of equilibrium. Dihydrostreptomycin causes less vestibular damage but may cause more auditory damage if used for long periods. This should be considered in administering the drugs, since there is now a growing trend to carry on chemotherapy for many months or more than a year.

Neomycin, viomycin, mycomycin, tibione (TB one) and other drugs have either proven to be too toxic, unstable or ineffective to have a very great place in the treatment of tuberculosis. However, some of them may be used in certain cases if other drugs have lost their effectiveness.

The nictonic acid hydrazenes, the most recently described anti-tuberculosis drugs, were announced in the newspapers the day of the panel meeting. The preliminary studies suggest that these new drugs may be useful in the study and treatment of tuberculosis.

Q. *What drugs are helpful in the management of chronic bronchitis?*

A. Several are used, either alone or in combination. They are used chiefly to relieve bronchial spasm, to thin secretions, and to combat infection. Correct diagnosis, as to the cause, is important, because severe upper respiratory infection, irritant gases and smoke, and at times allergic factors, if overlooked, may make the results of treatment seem unsatisfactory.

Expectorants such as ammonium chloride and potassium iodide are useful if given several times a day. Bronchodilator sprays (epinephrine, 1–100, or vaponephrin and others) may be given several times a day to relieve bronchial spasm. Occasionally antihistaminic drugs are helpful. If the sputum is purulent, relief often results

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President's Page

IT'S A "TOUGH JOB"

It's a "tough job" to be a good physician. A doctor never knows when he leaves home in the morning what the day will bring. He usually has a schedule, but often it is "shot" before the day is over. Urgent phone calls concerning real or fancied emergencies interrupt the office hours. There are complaints about fees, lack of progress, new pains or aches; requests for refilling of prescriptions; demands for a diagnosis to be made by phone or for immediate visits to the home or hospital. Luncheon is likely to be rushed or even missed at times. The doctor's family life may be greatly curtailed. Then, there's the constant job of keeping abreast of medical progress. On top of this, insurance forms to fill, leave slips to sign, and reports to dictate. And, as if all this were not enough, too often comes the ringing of the phone during the night.

Sometimes we get tired and discouraged and wonder if it is all worth while. But medicine is a noble calling. Let's never forget it. Let's always maintain our patience, never lose our temper. Let's be charitable to all, including our fellow practitioners. Let's not grumble, nor ever lose sight of our goal, the alleviation of human suffering, both physical and emotional.

We are subject to criticism, both individually and collectively. Some of the criticisms are justified, others are not. We must not worry about the latter, but we must pay attention to the former. One of these that comes readily to mind is the complaint that medical care is not obtainable at night. Fortunately, our efficient Medical Bureau is now handling that problem well, making use of a list of younger doctors who are willing to sacrifice their sleep in order to build up their practices and augment the family coffers. This is as it should be. We older men have done our stint—we must have our rest. One can't be losing sleep forever.

Our Grievance Committee knows many of the other problems, and it has done a good job. If you're ever called before that committee, it's wise to reveal all the facts and take the consequences. You're apt to come out better in the end.

None of us is perfect, and certainly not I. But through all the annoyances, embarrassment, discouragement and frustration, let's all try to maintain the dignity of our great Profession.

Wallace M. Yater

Editorials

THE ASSEMBLY PROGRAM

The Program Committee for the 23rd Annual Scientific Assembly is indeed proud of the array of distinguished guests and local speakers who have been invited to participate in the scientific sessions. Several features of the program are unique and represent a departure from the stylized formal presentation of papers commonly found in meetings of this type.

The opening address will be given by Dr. Walter Lincoln Palmer, Professor of Medicine at the University of Chicago. Dr. Palmer is a well known gastroenterologist and a former president of the American Gastroenterological Association. He will be followed by the Clinico-Pathological Conference, moderated by Dr. Ferdinand C. Helwig of Kansas City, Mo. Dr. Helwig is unusually adept in conducting conferences of this type. Those who have seen him in action at the annual meetings of the Southwest Clinical Society in Kansas City, Mo. will testify to his extraordinary abilities as a moderator. The case report to be discussed will be incorporated in the program. Several of the guest speakers will participate in the conference, which is one of the highlights of the program.

On the afternoon of the opening day, another very interesting and instructive symposium will be presented devoted to the subject, "Relationship of Gastric Ulcer to Cancer." Dr. George T. Pack, who is head of the Gastric and Mixed Services at the Memorial Hospital in New York, will moderate this symposium. Dr. Pack has done this before in New York in a manner which has won high praise from all practitioners of medicine, regardless of their specialties. In this symposium Dr. Pack presents a series of questions pertinent to the subject under discussion which will be distributed in advance to the participants. On the panel are a number of specialists, including a radiologist, pathologist, internist, gastroenterologist, surgeon and gastroscopist, all invited guests.

The Women's Medical Society has invited Dr. Irene A. Koeneke to give a paper that same afternoon and she will also address the annual dinner of the Women's Medical Society. Dr. Koeneke was an associate of the late Arthur E. Hertzler of "Horse and Buggy Doctor" fame at Halstead, Kansas.

Dr. Sidney C. Werner, of Presbyterian Hospital Medical Center in New York, will give a paper on his experience with the use of Radioiodine as a diagnostic tool in thyroid disorders. He has had a great deal of experience in this field as indicated by the following abstract from his paper: "It has been found from well over several thousand tests, that the estimation directly over the thyroid gland of the uptake of radioactive iodine, at 24 hours after the ingestion of the isotope, is a simple and 85 per cent accurate procedure in terms of correlation with the final diagnosis."

Dr. Henry I. Russek, of New York, will present what promises to be a very instructive paper on "A Critical Evaluation of Anticoagulant Therapy in the Treatment of Acute Myocardial Infarction." The following quotation from the abstract of his paper is of interest: "From an analysis of 1,047 consecutive cases treated by conservative methods, exclusive of anticoagulant drugs in 3 New York hospitals, evidence will be presented to show that no justification

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

exists for the employment of these agents in the milder attacks of the disease."

An excellent paper on the prognosis and treatment in benign and malignant hypertension will be given by Dr. Robert Sterling Palmer, Head of the Hypertension Clinic and Physician to the Massachusetts General Hospital in Boston.

A paper which represents some very interesting work will be presented by Dr. Robert H. High, Associate Professor of Pediatrics at Temple University School of Medicine, Philadelphia. The subject of his paper will be "Chronic Respiratory Diseases in Children."

Dr. J. Ross Veal, of Washington, D.C., will moderate an instructive Symposium on Pain in the Extremities at the Tuesday afternoon session. On Dr. Veal's panel will be an orthopedic surgeon, an internist, a neurosurgeon, a radiologist and a specialist in arthritis. Dr. Veal points out that pain in the extremities is one of the most common problems confronting all practitioners of medicine, and the symposium directed to this subject should be most stimulating.

At the Wednesday afternoon session a Symposium on the Conservation of Blood will be presented. The panel for this symposium will consist of Dr. Herbert P. Ramsey of Washington, D.C., Dr. Champ Lyons, Professor of Surgery at the University of Alabama, Dr. Irvine H. Page, Director of Research at the Cleveland (Ohio) Clinic, and Dr. Donald Stubbs of Washington, D.C.

On both Tuesday and Wednesday afternoons, Round Table Discussions will be held, each of which is limited to an attendance of fifty physicians. Round Tables will be held on Pediatrics, Internal Medicine, Obstetrics, Urology and Plastic Surgery.

Ralph M. Caulk, M.D.
Chairman, Program Committee,
Annual Scientific Assembly

BLIND BABIES

About eighteen months ago a rather unusual clinic was started at Children's Hospital and has gone forward with amazing success. This clinic is interesting and stimulating because it points up two serious problems. The first—what are the causes of blindness in children, and what can be done to prevent or cure it? The second—if blindness is unavoidable, what can be done to assist these children and their parents to adjust themselves to a seeing world?

There are numerous causes of blindness in children. Some causes are being eliminated, while new ones arise. Years ago, one of the chief causes of blindness was gonorrheal ophthalmia of the newborn. With Crede's prophylaxis and treatment by antibiotics, this condition is now a rarity.

Injury due to sharp objects (toys, arrows, knives, broken bottles, etc.) and explosives (fireworks and firearms) still cause a considerable loss in vision. Fortunately, through the efforts of the D.C. Society for the Prevention of Blindness and other interested organizations, education and legislation are being directed at minimizing these hazards. They can and have been reduced in other alert communities.

Some years ago congenital glaucoma led almost inevitably to blindness. Medical management was fruitless, and surgery offered very little more hope. More recently, through the enlightened clinical research of Barkan, an operation (goniotomy) has been revived and improved. When the patient is seen early, operated upon properly, and followed carefully, vision can be preserved in up to 75 per cent of all cases. This is a satisfying increase over the 5 to 10 per cent who retained vision by all other previous methods of treatment.

However, recently recognized causes of blindness in infancy must temper our enthusiasm until their causes are recognized and cures provided. About ten years ago a group of Australian physicians discovered that maternal rubella (or something closely simulating rubella) would often cause profound defects in the unborn child. Mental retardation, cardiac septal defects, deafness, and congenital cataracts were the most commonly recognized findings. Unfortunately, the treatment of this type of cataract is difficult, and the final visual result usually is poor. These children often must be treated as blind children.

Also, about ten to twelve years ago Terry in Boston began recognizing a form of retinal degeneration and proliferation with membrane formation behind the lens, which he called retrolental fibroplasia. This condition has increased greatly in incidence during the past ten years. Occurring almost exclusively in prematures, it is now one of the leading causes of blindness in children. Theories of etiology range from infection to disturbed retinal metabolism. In spite of extensive research during the past several years, no cause is known and treatment so far is fruitless. Large amounts of vitamin E, ACTH and cortisone, and administration of widely varying amounts of oxygen, have so far yielded little or no results.

Thus, certain causes of blindness in children are conquered while others appear. Medical research attempts to find causes and suggest treatment.

However, the physician has not discharged his responsibility when he has exhausted medical knowledge in dealing with blind children. These babies are otherwise healthy. They are going to grow to adulthood. If allowed to vegetate, they continue to be a burden on their family, their friends, and society at large. If encouraged and directed in the social adjustment to their blindness, they and their families are happy, and society has useful citizens instead of parasites.

The clinic for the Social Adjustment of the Pre-School Blind at Children's Hospital has a roster of 43 blind children currently being helped. There is an active parents' organization which holds regular meetings to encourage and educate the parents of blind babies. The Washington Alumnae Chapter of Delta Gamma Fraternity finances this clinic, and paid workers direct its activities.

The ophthalmologist and other physicians have a very important place in this scheme for making useful citizens of blind babies. Every blind child can profit by referral to the Clinic for the Pre-School Blind as early in life as possible. A sympathetic and intelligent referral is the physician's special privilege.

F. D. C.

THE OPERATIVE RECORDS

The record of an operation is one of the most important contributions to a patient's history, and, at the same time, one of the most neglected. Outside of its scientific value, it primarily benefits the patient particularly in the event of a succeeding illness, it is a protection to the hospital and the doctor from a medico-legal viewpoint, and it is useful in medical research.

The surgeon is wholly responsible for what appears on this record, whether he writes it or dictates it in person, or delegates this duty to an assistant or intern. Only when the patient's history is introduced in court is this relationship realized.

To hospital administrators, the failure to complete a description of the operation, as prescribed by the regulations of all approved hospitals, has not only been a source of major irritation, but they are at a loss to explain the seeming aversion some surgeons possess to fulfilling this obligation. The hospitals have done all that was reasonably expected to facilitate this work, by employing stenographers and typists and furnishing dictating units, but it is only by dint of perseverance on the part of the record librarian that it is finally accomplished. Telephone calls and repeated letters usually fail, and only by a threat to cancel hospital privileges are some of the delinquents rounded up. It seems almost impossible to believe that it is necessary to use punitive measures in this day and age.

The description of the operation often leaves much to be desired or may be painfully redundant. An operation may be summarized by one with 10 words, while the neophyte will elaborate on a simple procedure that covers 2 typewritten pages.

If the surgeon could only appreciate that a little coöperation on his part would save many hours of labor to the clerical force, would be an item in raising the standard of hospitalization, and may be a bulwark in a litigation case, he would no doubt find it possible to assume this duty promptly, and even cheerfully.

C. S. W.

DR. McCORMICK OF TOLEDO PRESIDENT-ELECT OF AMA

More than 13,000 physicians, of a total attendance of 28,122, registered for the 101st Annual Session of the American Medical Association in Chicago, June 9–13. Many Washington physicians attended the meetings in addition to the official delegates of the Medical Society of the District of Columbia, Dr. Herbert P. Ramsey and Dr. Hugh H. Hussey. Theodore Wiprud, Secretary, and Lawrence A. Zupan, Assistant Secretary, of the Medical Society, attended the meetings of the House of Delegates of AMA, the Conference of Presidents and Other Officers of State Medical Associations, June 8, and the Medical Society Executives Conference, June 9.

Dr. Edward J. McCormick, of Toledo, Ohio, a member of the Board of Trustees of the AMA since 1947, is the new President-elect of the Association. He will take office in June, 1953. Dr. McCormick served with the British Expeditionary Force in France during World War I; in 1919 he was a member of the surgical service at Walter Reed Hospital in Washington. He is Past President of the Ohio State Medical Association and was a member of the Council on Medical Service from 1943 to 1947, the last two years as Chairman. He was named a member of the Committee on Scientific Exhibit of the AMA in 1947, and its Chairman in 1950. He was appointed to the Council on Industrial Health in 1947 and a member of the Coördinating Committee, which is directing the national education campaign, in 1950.

EDWARD J. McCORMICK, M.D.
President-elect, American Medical Association

Dr. Louis H. Bauer, cardiologist, of Hempstead, New York, took office as President of the AMA, June 10. The ceremonies in the Grand Ballroom of the Palmer House were broadcast over 200 radio network stations in the United States, Hawaii and Alaska. Dr. Bauer, who succeeded Dr. John W. Cline, of San Francisco, has been Chairman of the Council on Medical Service and a member of the Board of Trustees of the AMA. He was elected Chairman of the Board in June, 1949.

Dr. Bauer spent 13 years in the Army Medical

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Corps, resigning in 1926. He has been in private practice since 1930. He was the first medical director of civil aeronautics, 1926 to 1930, and was the first commandant of the Army School of Aviation Medicine. He was the first President of the Aero Medical Association of the United States, 1929–31. Since 1930 he has been Editor-in-chief of the *Journal of Aviation Medicine;* he is the author of "Private Enterprise or Government in Medicine," published in 1948. Since 1948 he has been Secretary-General of the World Medical Association.

Dr. Leo F. Schiff, New York City, was elected Vice President of the AMA, and Dr. James R. Reuling, Bayside, N. Y., Speaker of the House. Reëlected to office were Dr. J. J. Moore, Chicago, Treasurer, and Dr. George F. Lull, Chicago, Secretary. Dr. James R. McVay, of Kansas City, Missouri, was selected to replace Dr. McCormick on the Board of Trustees. Dr. Dwight H. Murray, of Napa, Calif., was reëlected Chairman of the Board of Trustees.

Dr. Paul Dudley White, of Boston, Mass., internationalist and humanitarian, was selected by the House of Delegates to receive the Distinguished Service Award for 1952.

Dr. Walter H. Roehll, of Middletown, Ohio, a passenger on the snow-stalled Southern Pacific streamliner, "City of San Francisco," in Donner Pass last winter, was cited by the House of Delegates for his "untiring zeal far beyond the call of duty in administering to those of his fellow passengers who needed medical care."

Dr. Joseph S. Lawrence, who is retiring as Director of the AMA's Washington office on September 1, was honored at a testimonial luncheon, June 8, at the Palmer House, which was attended by 300 friends. Dr. John W. Cline, retiring President of the AMA, presented Dr. Lawrence with a scrapbook containing hundreds of appreciative letters from physicians and Congressmen. Among 60 letters of regret were those from such distinguished public officials as Senators Robert Taft, of Ohio, Lister Hill, of Alabama, Owen Brewster, of Maine, John McClelland, of Arkansas, Everett Dirksen, of Illinois, Lester Hunt, of Wyoming, and Irving Ives, of New York; Dr. Wallace Graham, Physician to the President of the United States; Surgeons General Lamont Pugh, of the Navy, George E. Armstrong, of the Army, Harry G. Armstrong, of the Air Force, and Leonard A. Scheele, of the Public Health Service; and Admiral Joel T. Boone, Medical Director of the Veterans Administration. Dr. Frank D. Costenbader, retiring President of the District Medical Society, Dr. William P. Herbst, and Dr. Joseph S. Wall also sent regrets.

Because of the large number of scientific presentations, as many as ten scientific sessions were held simultaneously, mornings and afternoons, nearly all at the Navy Pier. Seven papers presented before as many sections were authored or co-authored by members of the Medical Society of the District of Columbia. The list follows:

Section on Anesthesiology: "Studies on Resuscitation: An Experimental Evaluation of the Bloxsom Air-Lok," Dr. Virginia Apgar, New York, and Dr. Joseph Kreiselman, Washington

Section on Diseases of the Chest: Chairman's Address, "Recent Trends in Diseases of the Chset," Dr. J. Winthrop Peabody

Section on Experimental Medicine and Therapeutics: Symposium on Use of Chemotherapeutic and Antibiotic Agents—"In Infections of the Respiratory System," Dr. Monroe J. Romansky

Section on Gastroenterology and Proctology: "Adenomatous Polyps of the Colon and Rectum," Dr. Alejandro F. Castro

Sections on Military Medicine, Preventive and Industrial Medicine and Public Health, and Radiology, in joint meeting: "The Present Status of Mass Screening Technics for Chest: Radiologic Aspects," Dr. Arthur C. Christie

Section on Nervous and Mental Diseases: "The Recognition of Surgically Treatable Neurologic Disorders of Childhood," Drs. Jonathan M. Williams and Harold Stevens

Section on Preventive and Industrial Medicine and Public Health: "Public Health Aspects of Arthritis," Dr. Russell M. Wilder

Members of the Society who participated in the program as discussants of scientific papers were: Drs. Wilder, George E. Armstrong, Harry G. Armstrong, Pearce Bailey, James F. Mitchell, Lloyd H. Mousel, Lamont Pugh, Edwin J. Pulaski, and Sydney Ross.

In a television broadcast, June 11, over WNBQ, Dr. Theodore C. C. Fong was interviewed on the Garroway Show, "Today"; the topic discussed was "Emotional Problems of the Aged." Dr. Fong is in charge of the new Geriatrics Unit at St. Elizabeths Hospital.

More than 300 medical exhibits, prepared by physicians and other scientists, were on display, comprising the largest scientific showing of its kind. Exhibit symposiums were presented on diabetes, overweight and cardiovascular diseases. Dr. Wilder was a member of the sponsoring committee on the Symposium on Overweight, Nutrition and Health; Dr. Joseph M. Barker participated in a Question and Answer Conference on overweight as related to cardiovascular disease. Dr. J. Ross Veal, with Dr. Freeman of San Francisco and Dr. Zimmerman of Chicago, participated in a Question and Answer Conference on cardiovascular diseases, specifically "Varicose Veins and Their Complications."

The AMA Council on Physical Medicine and Rehabilitation and the American National Red Cross coöperated to demonstrate the latest system of artificial respiration, called the back pressure-arm lift method. This and other life-saving rescue measures were shown daily at the end of the Navy Pier.

DR. LAWRENCE HONORED AT LUNCHEON

Dr. Joseph S. Lawrence (left), retiring Director of the Washington Office of the American Medical Association, is presented a scrapbook containing hundreds of appreciative letters from physicians and Congressmen by Dr. John W. Cline, San Francisco, President of the AMA. The luncheon was held on June 8 at the Palmer House.

Drs. Paul Kiernan and John C. Sullivan, of Georgetown University School of Medicine and Gallinger Municipal Hospital, received Honorable Mention for their exhibit on "Post Subtotal Gastrectomy Syndrome." A Certificate of Merit was awarded Dr. Joseph T. Roberts, University of Buffalo School of Medicine, for an exhibit on "A New Blood Supply for Ischemic Hearts and Lungs."

Other members of the Medical Society presented or assisted in presenting the following scientific exhibits:

"Changing Patterns in the Susceptibility of Microörganisms to Antibiotics," Col. Dwight M. Kuhns, MC, USA, Drs. Matthew H. Fusillo and Monroe J. Romansky, Walter Reed Army Hospital and George Washington University School of Medicine

"Form Fitting Plastic Cranioplasty," Dr. William T. Spence, Georgetown University Medical Center

"Newer Trends in Geriatric Psychiatry," Drs. Winfred Overholser, Theodore C. C. Fong, and Solomon Katzenelbogen, St. Elizabeths Hospital

"ACTH and Cortisone in Blood Dyscrasias," Drs. Oscar B. Hunter, Jr. and Paul Kiernan, Georgetown University School of Medicine and The Doctors Hospital Research Foundation

"Physical Medicine and Rehabilitation in Acute Myocardial Infarction," Drs. Louis B. Newman, L. A. Baker, M. F. Andrews, and E. L. Jameson, Veterans Administration Hospital, Hines, Illinois, and Dr. A. B. C. Knudson, Veterans Administration, Washington

"Tuberculosis Case Finding Survey," Dr. Leo V. Schneider, Tuberculosis Control Section, Tuberculosis Division, Veterans Administration

"Blood Program of the American National Red Cross," Major General David N. W. Grant (ret.) and Dr. Russell L. Haden,† American National Red Cross

"Studies in Technic of Intestinal Anastomosis—(A) Two Layer Technic; (B) One Layer Technic," Drs. Charles A. Hugnagel, Robert J. Coffey, Leonard W. Weyl, and John F. Gillespie, Georgetown University Hospital

"A Concept of Maternal and Neonatal Care," Drs. Preston A. McLendon and John Parks, George Washington University School of Medicine.

Captain George N. Raines, MC, USN, represented the Navy at the meetings of the Section on Nervous and Mental Diseases. Captain Raines, who was appointed to the American Board of Psychiatry and

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† Deceased

Neurology by the AMA, attended the business meetings of the Board and, on June 13 and 14, participated in the examination of candidates for certification by the Specialty Board.

Many scientific organizations schedule their annual meetings in advance of the meeting of the AMA. The American College of Chest Physicians held its 18th Annual Meeting at the Congress Hotel, June 5–8. One of the features of the meeting was a series of Round Table Luncheons. Dr. Peabody was moderator at a Luncheon meeting on "Management of Cough" and Dr. Edgar W. Davis on "Congenital Heart Disease." Dr. J. Winthrop Peabody, Jr., was co-author of a paper on "The Usefulness of the Hotchkiss-McManus Stain for the Diagnosis of the Deep Mycoses" at the general scientific session of the College, June 5.

The American Geriatrics Society held its 9th Annual Meeting, June 5, 6 and 7 at the Hotel La Salle. Dr. F. Daniel Suttenfield, Second Vice President of the Society, reports that all officers were reëlected and that the membership in the organization had increased over 400 per cent within the past year.

DELEGATES' REPORT ON AMA MEETING

As on several previous occasions, the Conference of Presidents and Other Officers of State Medical Associations, held the day before the first meeting of the AMA House of Delegates, seemed to keynote the important issues before the House. The principal theme of the conference was the need for political and social action on the part of individual physicians. At the opening of the House of Delegates, even Cardinal Stritch's invocation played on this theme when he prayed as much for protection of our democracy as for enlightenment in medical matters.

Legislation and Public Relations

The preoccupation of this AMA session with political issues was reflected in certain exciting developments in the field of legislation and public relations. Two items stood out: concern with activities of the President's Commission on the Health Needs of the Nation, and consideration of H.R. 7800.

The furor about President Truman's Commission started with AMA President Cline's opening address to the House of Delegates. In his speech Dr. Cline condemned the Commission as politically inspired, and he castigated Commission Chairman Paul Magnuson for his attitude toward AMA leaders. Following this, an Illinois delegate introduced a resolution which strongly denounced the Commission and its chairman. After one or two false starts, this resolution eventually found its way to the Reference Committee on Legislation and Public Relations. Reference Committee hearings were marked by unusually fiery debate, including two or three personal appearances by Chairman Magnuson. The final approved report of the Reference Committee commended AMA leaders for their stand regarding the President's Commission, but warned against prejudgment of the Commission's activities until a final report becomes available for study.

H.R. 7800 was a bill under consideration by the House of Representatives and had previously been the object of AMA attack. The greater part of this bill seems to be entirely praiseworthy. It seeks to enlarge social security benefits. In its original form, the bill contained a section (Section 3) which gave unusual medical powers to the Administrator of the Federal Security Agency. AMA opposition to this section had delayed passage of the bill and had led to a deletion of some of the provisions from Section 3. The entire matter was presented to the House of Delegates on the last day of their meeting. Emergency action was requested because it was anticipated that the House of Representatives would reconsider H.R. 7800 on the Monday following. The presentation of this matter led to the declaration of Executive Session for the first time in several years. However, Executive Session was soon terminated when it became apparent that the current debate should not be excluded from public knowledge. Final action of the House of Delegates was an endorsement of the policy of condemnation of H.R. 7800 because of the objectionable Section 3. This AMA opposition had little apparent effect for subsequently the bill was passed by the House of Representatives on June 17, 1952. The Senate passed the bill later without Section 3 and in conference a final adjustment was made which may require subsequent legislation to clarify.

In other matters of interest in the field of legislation and public relations, the AMA House of Delegates took these actions:

Played watchdog against international agreements that might bind the United States to change our democratic principles.

Commended Whitaker and Baxter for their part in the National Education Campaign, and listened hopefully to a report that the Campaign is to end this year.

Approved the idea of supporting an amendment to the Constitution of the United States which would limit Federal taxation.

Matters of Local Interest

Five resolutions were presented on behalf of the Medical Society of the District of Columbia to this meeting of the House of Delegates. One recommending reactivation of an AMA Committee on Motor Vehicle Accidents was referred to the Board of Trustees for further study. Another which urged doctors to discharge political responsibility but denied AMA support to any party or candidate for elective public office was approved by the House of Delegates. The one concerning medical care of veterans received no action. The one recommending prompt transfer of seriously disabled veterans from armed forces hospitals to veterans hospitals was approved. The one concerning medical care for dependents of service personnel was referred to a special committee of the Council on Federal Medical Services.

The report of the Committee on Blood Banks was handled again this year by District of Columbia Delegate Herbert P. Ramsey, who has been appointed Co-chairman of that Committee. Among many items noted in the report, it was revealed that plasma processing plants are not now being supplied blood up to their capacity.

Other matters of special interest included:

A beautiful tribute to the late Oscar B. Hunter, Sr.

Recommendation to the Board of Tustees for further study of a North Carolina resolution regarding acceptance of a negro medical society into the American Medical Association in a special way, and of a New Jersey resolution requesting an increase in compensation to state medical societies for collection of AMA dues.

Medical Education and the Hospitals

There were thorny problems in this category. A good deal of time was taken up in reference committee hearings on the subject of specialty ratings under AMA sponsorship for nonphysician professional groups (clinical psychologists and microbiologists in particular). A joint committee of the Council on Medical Education and of the Board of Trustees is studying the whole problem of recognition of "fringe" or ancillary personnel and until it reports no further specialty boards will be approved.

Much time also was devoted to consideration of the disparity of the number of internships available and the number of medical graduates annually. There was general agreement that something must be done about this problem but the House of Delegates couldn't say what.

Also in this field the House listened to a slightly more favorable report from the Medical Education Foundation which is still struggling to overcome the apathy of individual physicians.

There were friendly overtures toward the osteopaths, but it may be a long time before anything comes of this.

The House also approved a revision of the requirements of essentials of approved residencies and fellowships in anesthesiology, and essentials of an acceptable school for medical record librarians.

Awards and Elections

Dr. Paul Dudley White of Boston was given this year's Distinguished Service Award, and a posthumous citation for distinguished service was given to science writer Howard Blakeslee.

In the annual elections the following officers were among those elected:

1. President-elect, Edward J. McCormick, Toledo, Ohio
2. Vice President, Leo F. Schiff, New York City
3. Speaker of the House of Delegates, James R. Reuling, Bayside, New York
4. Vice Speaker, E. Vincent Askey, Los Angeles
5. Members of the Board of Trustees:
   a. Dwight H. Murray, Napa, California, to succeed himself
   b. James R. McVay, Kansas City, Missouri, to replace Dr. McCormick

A nice tribute was paid to retiring President John

IMPORTANT CHANGE IN FCC RULING

The Federal Communications Commission has amended Section 18.51 of the Commission's Rules and Regulations, thereby granting an extension until June 30, 1953 for users to secure FCC type approval or certification of diathermy equipment, the manufacture and assembly of which was completed prior to July 1, 1947. The appendix to the ruling provides, however, that the extension shall be applicable "only if such steps as may be suitable under the circumstances are promptly taken to eliminate interference to authorized radio services" resulting from the operation of equipment manufactured prior to the above date.

W. Cline, when he was elected a member of the Council on Medical Education and Hospitals.

MISCELLANEOUS

Other outstanding trends and activities in this session of the House of Delegates included:

Maintenance of a place of leadership in planning of Civil Defense.

Voting of a generous honorarium for the President and President-elect of the AMA.

Establishing 1953 dues at the present level of $25.00, including a subscription to the J.A.M.A.

Voting to pay travel expenses to AMA meetings for Section delegates.

Changing the mechanism for selection of the general practitioner of the year so that it will now be done by an anonymous impartial committee appointed by the Board of Trustees.

Lining up the coming meetings of the AMA as follows: 1952 Clinical Session, Denver; 1953 Annual Session, New York; 1953 Clinical Session, St. Louis; 1954 Annual Session, San Francisco; 1954 Clinical Session, Miami; 1955 Annual Session, Atlantic City; 1955 Clinical Session, Boston.

HERBERT P. RAMSEY, M.D.
HUGH H. HUSSEY, M.D.
Delegates
THEODORE WIPRUD
Secretary

CORRESPONDENCE

WASHINGTON, D. C., July 3, 1952

TO THE EDITOR:

Reference is made to our recent correspondence regarding a register of names of physicians interested in giving immunization needed in international travel. This system is evidently working out satisfactorily to the public as we have had no calls after referring the traveler to your office.

Recently we have had several inquiries asking who should be the certifying officer for the smallpox data. This information should be certified by the local or state health officer of the area in which the immunizing physician practices. In the District of Columbia, Dr. Eckhart of the D. C. Health Department is the certifying officer; he is located in Room 6150 of the New Municipal Building at 3rd and C. Streets, N.W. In the suburban areas, the country health officers certify for physicians in their locale. The foregoing also applies when cholera inoculations are given.

It would be greatly appreciated if this information was given publicity in your monthly medical journal.

Thank you for your coöperation in the past and in this matter.

Sincerely yours,
RALPH GREGG, *Medical Director: Acting Chief, Division of Foreign Quarantine, Public Health Service*

STANDARDIZATION OF PROTHROMBIN TIME DETERMINATIONS

The value of any clinical laboratory procedure is in direct proportion to the accuracy of the determination, the reproducability of the results in laboratories other than the originator, and the ability of the clinician and clinical pathologist to properly interpret the results reported. The control of the clotting mechanism of the blood has become a most valuable aid in the treatment of cardiovascular accidents, such as coronary artery thrombosis and myocardial infarction, and the prevention and treatment of thrombo-embolism. Mortality and morbidity have been reduced significantly by the proper use of anticoagulant therapy.

In treating patients with such conditions, those charged with their care have come to realize the difficulties and hazards which may be encountered by the improper use of anticoagulant therapy or if the plasma prothrombin time determinations are not properly performed by trained technicians and standardized methods employed. Clinicians have also encountered difficulty in interpreting laboratory reports because hospital laboratories in the same community lack uniformity in reporting prothrombin time determinations. A physician treating 2 patients with myocardial infarction in different hospitals could be greatly confused by variations in the terminology of the 2 laboratory reports and he could be doubly confused if different technics had been used. It is probable that in the past some physicians and surgeons have restricted the use of anticoagulant therapy because of the difficulties and uncertainties connected with the interpretation of reports. Various organizations of pathologists, the branches of the American Heart Association, the U. S. Public Health Service, and manufacturers of biological reagents are now coöperating in an effort to change and improve this disturbing situation.

Mindful of the responsibilities of the pathologists in this matter, the Section on Pathology and Laboratory Medicine of the Medical Society of the District of Columbia conducted a survey of the methods used to determine the prothrombin time of blood plasma, including their accuracy, in the clinical laboratories of the hospitals of the District of Columbia and nearby Maryland and Virginia. Fourteen laboratories participated in the study. This survey included a study of the methods and reagents used, the methods of reporting prothrombin time determinations, and a comparison of the results of these determinations as performed in these institutions. Specimens of blood plasma were exchanged and a comparison was made of the results obtained by several laboratories which had examined the same specimens.

The methods used by all of the hospital laboratories were essentially the same and the results obtained compared satisfactorily with each other. There was considerable variation in reporting the results of the examinations. Although the actual prothrombin time in seconds was given in the reports by all the laboratories, many of the other terms used were confusing to the clinician because of a lack of uniformity.

At a meeting of the Section on Pathology and Laboratory Medicine on May 10, 1952, it was recommended that:

A. Reports of prothrombin determinations should include the following:

1. Prothrombin time in seconds, of the undiluted test plasma and of the control
2. Prothrombin activity, — per cent normal, determined by interpolation of the test results on a standardization curve prepared diluting the normal control plasma.

B. All hospitals and pathologists in the area should use the same terms for designating results, in conformity with that given above so as to minimize confusion.

Pathologists of the Washington Metropolitan Area feel that a valuable step forward has been taken toward standardizing laboratory reports of the local hospitals. By means of this survey clinicians have also been assured of the accuracy of prothrombin time determinations. Laboratory directors invite physicians having any problems connected with the interpreting of reports to consult with them.

Previous to the prothrombin time survey, the the Section on Pathology and Laboratory Medicine adopted a standard procedure for crossmatching prior to transfusion to be used by hospital laboratories of the Washington area.

The Section on Pathology and Laboratory Medicine, by standardizing technics for crossmatching for transfusion and for prothrombin time determinations, is beginning a continuing program aimed toward standardizing all clinical laboratory methods in the Washington Metropolitan Area.

POSTGRADUATE COURSES FOR MILITARY AND CIVILIAN DOCTORS

The Army Medical Services will conduct 17 short postgraduate courses in surgery, psychiatry and other subjects of major medical importance during the last six months of 1952.

The instruction is open to both military and civilian physicians and is the broadest program of postgraduate professional training of this type ever sponsored by the Army Medical Service, according to Major General George E. Armstrong, Surgeon General of the Army. The courses will be given at six large Army teaching hospitals and the Armed Forces Institute of Pathology in Washington, D. C.

Postgraduate training is designed to ensure that all Army personnel continue to receive the finest professional medical care obtainable. The courses are an integral part of the Army's career plan for medical officers under which physicians are encouraged to continue their professional education. The instruction also serves to keep medical officers in outlying installations abreast of new developments and to foster the growth of teachers in the Army Medical Service.

The largest number of spaces in each course is reserved for Army Medical Corps officers on active duty. Smaller quotas have been established also for Army Reserve and National Guard medical officers and Air Force medical officers. Civilian physicians serving in other Federal agencies or in private practice will be enrolled on a space-available basis.

Eligible applicants must have attained one of two qualification levels. Those considered to be at Level I are Board-certified or Board-qualified physicians, chiefs or assistant chiefs of services in hospitals, and other officers well advanced in the study of their specialty. Applicants with Level II qualifications include officers partially qualified in a specialty, those with a special interest in the subject, or ward officers or unit surgeons responsible for medical treatment in the specialty concerned.

Medical officers receiving residency training may attend courses only at hospitals where they are serving.

Following is a calendar of the courses of instruction being offered in the Washington area:

August 25–September 6: **Psychotherapeutic Medicine,** Walter Reed Army Hospital. Open to 25 Level II Medical Corps officers from the First and Second Army areas and the Military District of Washington. This course is designed for physicians and surgeons without prior specialty training in psychiatry. It will include principles of interviewing, personality development and symptom formation, psychosomatic disorders and therapy for the mental patient.

September 22–26: **Exfoliative cytology and cancer detection,** Walter Reed Army Hospital. Open to 50 Level I and II physicians, pathologists, gynecologists and surgeons from all Army areas. After discussing the value and limitations of exfoliative cytology in cancer detection, this course takes up the collection preservation and preparation of material and training in cytodiagnostic technics.

October 1–3: **Physical Medicine,** Walter Reed Army Hospital. Open to 20 Level I physicians from all Army areas. This intensive postgraduate offering for the specialist reviews the problem of pain, etiologic factors and rehabilitation in neuromuscular considerations.

October 14–16: **Radiology,** Walter Reed Army Hospital. Open to 30 Level II radiologists and others interested in the subject from all Army areas. The course will review modern field X-ray equipment, radiobiology, radiation protection of personnel and radiation therapy in carcinoma.

October 20–24: **Pathology of ionizing radiation Injuries,** Armed Forces Institute of Pathology. Open to 20 Level I and II physicians from all Army areas. The course includes a review of biologic effects and mechanism of injury, genetics, respiratory system injury, total body radiation injury in the human and a survey of recent developments.

November 3–8: **Internal medicine,** Walter Reed Army Hospital. Open to 40 Level I physicians from First, Second and Third Army areas and the Military District of Washington. A comprehensive review of current problems in internal medicine, with emphasis on pulmonary function, cardiovascular disease, chemotherapy and the antibiotics.

November 17–21: **Surgery,** Walter Reed Army Hospital. Open to 75 Level I surgeons from the First and Second Army areas and the Military District of Washington. This general review of the high points in surgery includes anatomy, advances in radiologic diagnostic procedures, principles of electrolyte therapy and panels on anesthesia, shock, cancer and cardiovascular surgery.

December 1–5: **Forensic Pathology,** Armed Forces Institute of Pathology. Open to 28 Level I and II pathologists from all Army areas. A comprehensive course in legal medicine, including military law and medico-legal autopsy, consisting of staff conferences and demonstrations.

December 8–12: **Clinical pathology,** Walter Reed Army Hospital. Open to 50 Level I and II physicians and Medical Service Corps pathologists from all Army areas. This survey encompasses the operation of a blood bank, hematology, recent studies of hemolytic anemias, new technics in typing and cross matching of blood, diagnosis of hemorrhagic disease and a wide range of other problems in pathology.

Applications from Army medical officers on active duty and full-time Civil Service physicians at Army installations should be forwarded to the Office of the

Surgeon General, Department of the Army, Washington 25, D. C., Attention: Career Management Branch, Personnel Division. They should be received six weeks prior to the opening date of the course.

Reserve medical officers should apply to their Army area commander, while National Guard physicians should write to the National Guard Bureau in Washington. Civilian physicians in the Federal service or in private practice should apply to the appropriate hospital or installation commander.

WOMAN'S AUXILIARY NOTES

The members of the Woman's Auxiliary to the Medical Society of the District of Columbia will have as their President, for the year 1952–1953, Mrs. Ernest E. Hadley, who has been elected to serve under the amended By-laws. During her many years of membership in the Auxiliary Mrs. Hadley has devoted much time to its activities both as an officer and as head of various committees. She is therefore well qualified to serve as President of the Auxiliary, and, under her leadership, the year 1952–1953 should be an active and enthusiastic one both in philanthropic and social endeavors.

One of the first social functions will be a luncheon to be held during the Annual Scientific Assembly of the D. C. Medical Society late in September. Plans are under way and will be announced later.

An important continuing project of the Auxiliary is its Nurses' Scholarship Fund, which was set up to give financial assistance to selected girls with high scholastic records who desire to become nurses.

The new officers and committee chairmen are as follows:

MRS. ERNEST E. HADLEY

President, Woman's Auxiliary to the Medical Society of the District of Columbia

Officers:

President: Mrs. Hadley
President-elect: Mrs. Richard H. Todd
First Vice President: Mrs. Duane C. Richtmeyer
Second Vice President: Mrs. M. Noel Stow
Recording Secretary: Mrs. William J. G. Davis
Corresponding Secretary: Mrs. James H. Scully
Treasurer: Mrs. John A. Reisinger
Historian: Mrs. William J. B. Orr
Parliamentarian: Mrs. A. Magruder MacDonald

Committee Chairmen:

Membership: Mrs. William D. Terrell, Jr.
Ways and Means: Mrs. G. Louis Weller
Program: Mrs. Wallace M. Yater
Finance: Mrs. Henry A. Hornthal
Social: Mrs. Lawrence A. Rapee
Publicity: Mrs. Leo C. Varden
House: Mrs. John J. Calarco
Public Relations: Mrs. E. Herbert Bauersfeld
Philanthropic: Mrs. Joseph L. Gilbert
Educational: Mrs. Leonard T. Peterson
Bulletin and *Today's Health*: Mrs. George J. Stuart
Legislative: Mrs. Jonathan M. Williams
Advisory: Mrs. Richard E. Dunkley

Mrs. Leo C. Varden
Publicity Chairman

Concerning Those Who Work with Us

PODIATRY

EDWARD E. THOMPSON, D.S.C.

Washington

The strength of modern medicine, as it is known today, has come about through a history of acceptance and rejection. Through the centuries new doctrines seeking to interpret the causes of diseases and to treat them have come upon the horizon. The good and the scientifically accurate have remained. The false have been turned away.

In each instance acceptance followed a long period of growth and proof of the ability to produce results. History records that surgery once was a part of the barber trade; obstetrics once was the province of the midwife. These trades became professions only through an evolution of improved training and education, built around the basic sciences.

Just as this growth occurred for the specialties within the profession of medicine, it occurred for current ancillary professions of the healing arts. An example is dentistry, which reached its present status through a long evolutionary pattern of its own.

More than a half century ago another group of craftsmen, chiropodists, began their march toward the status of a profession. These men and women knew that by using certain contrivances and the knife they could make people with minor foot ailments more comfortable. These were not the corn-cutters of the past, who hawked their services on street corners and solicited business from door to door. But neither did they know, or pretend to know, about the anatomy or physiology of the ills they treated or about what caused them.

In 1895 this group of craftsmen won from the New York State Legislature the right to organize and founded the Pedic Society of New York. Soon the recognition they had won led to establishment of the first chiropody practice act.

About 15 years later another progressive group approached medical leaders with a proposal to improve the scientific care of the foot. This group thought that the emphasis placed upon medical care of the foot was inadequate because the curricula of medical colleges devoted scant attention to it. Encouraged by medical leaders, the group, led by a doctor of medicine of high standing, was instrumental in starting a teaching center to offer courses in modern scientific training.

Today Maurice J. Lewi M.D., at 81 years of age, still holds the presidency of the Long Island University College of Podiatry. Recently he told a conference that it was "the happiest day of my life when our school became affiliated with a university and its course of instruction was elevated to that of medicine."

At about the time of World War I the word "podiatry" came into use because it was felt that it was etymologically more correct than "chiropody." Since then, however, the two terms have been used synonymously. Today every state controls the licensing of podiatrists. The District of Columbia requires each licensee to be a graduate of a recognized (4-year) podiatry college and to be capable of passing a comprehensive examination.

There now are 6 accredited colleges, 2 of which, Long Island and Temple, are university-affiliated. The study course has advanced from 1 year of night school with an entrance requirement of 2 years of high school to 4 years of study with an entrance requirement of 2 years of selected college work. Medical doctors must head certain departments, including orthopedics, and over half of the instructors are doctors of medicine.

Of the factors which have played parts in raising podiatry to the status of a profession, the need for concentrated attention to the early signs of disease is one of the most significant to all practitioners of the healing arts. A number of diseases, such as diabetes (gangrene), locomotor ataxia, and Raynaud's disease, may show their first symptoms in the feet. It is important that these early signs not be missed.

The podiatrist is among the first to encounter symptoms of peripheral vascular disturbances, most common of which is arteriosclerosis. Treatment of these cases is done in coöperation with the systemic treatment by a physician, and consists basically of physiotherapy, orthopedic correction, and removal of excrescences which may cause infection.

While major conditions are referred to the doctor of medicine specializing in orthopedics, there are many orthopedic foot defects, mostly occupational, seen every day which can be treated, not by surgery but by some mechanical means. They include strapping, shoe wedging, plaster casts for appliances, and the use of various plastic materials.

In spite of the desirability for coöperation in many cases between the orthopedic specialist and the podiatrist, interprofessional relationships between the two, until a few years ago, frequently were below par. However, podiatry's increase in educational standards and the introduction of podiatrists to hospitals have played major roles in bringing to light the capabilities and qualifications of podiatrists. Through this improved understanding referred work between the two has increased steadily.

Dr. Elliott P. Joslin, of Harvard University, was the first physician to recognize the importance of special foot care for diabetics and set up the first podiatry clinic at the New England Deaconess Hospital in Boston. Since then large hospitals throughout the country have followed suit. In the District of Columbia 6 hospitals now have podiatry clinics, where altogether at least 100 patients are treated each week.

Dr. Joslin, as reported in one reference, is quoted as saying that "the work done by podiatrists, particularly for diabetic patients in hospitals, is invaluable. . . . I heartily favor the association of podiatrists with doctors and surgeons in the hospitals of the country."

At a meeting in Washington Dr. Joslin also pointed out that arteriosclerosis has grown in importance from 17 per cent of diabetic deaths 50 years ago to 67 per cent at the present. Nevertheless, he said, "concrete proof that the podiatrist and the doctors, with the aid of new drugs, are calling a halt to this progress, is unmistakably demonstrated by the decrease in deaths due to gangrene of the feet from 8.1 per cent many years ago to 2.9 per cent at the present time."

Podiatry's interest in the diabetic has been demonstrated many times. Recently, as associate members of the Clinical Society of the District of Columbia Diabetes Association, podiatrists assisted in diabetes detection work.

On the subject of physician-podiatrist relations, Dr. Robert McElvenny, Chicago orthopedic surgeon, has stated that podiatry "follows the teachings and precepts of recognized medical practice and must draw on all the resources known to the whole field of medical practice."

The Judicial Council of the American Medical Association has stated that "chiropody is a practice ancillary—a handmaiden to medical practice in a limited field. General opinion seems to be that chiropody fairly well satisfies a gap that the medical profession has failed to fill."

Among other physician comments on relations with podiatry, Dr. Charles W. Mayo stated in an address to podiatrists in Des Moines: "I am convinced, however, that doctors of medicine, myself included, have paid too little attention to the feet in their relationship to the condition of the patient, and have made too cursory an examination of the feet considering their importance to people with the beating they take—and their potentiality as a source of comfort or discomfort. The doctor of medicine, when care and treatment of such conditions are necessary, should refer the patient to those accredited and skilled in that specialty if consultation is available."

Dr. Mayo also declared that, "as a member of the medical profession, I extend to you (podiatry) my congratulations on being a closely related and integrated group which has filled a great need in the interest of health and comfort of the feet and the ills of the body as they are related to the feet."

Podiatry is limited by law to the medical, mechanical and surgical treatment of the human foot. Taught by physicians, accepted by medicine as an ancillary, always loyal to legitimate medicine, this specialty has won for itself a definite place among those groups where interprofessional relationship is essential to the best interests of progressive medicine.

The whole training of podiatrists is based on the principle that the patient be kept ambulatory. Such practice requires special skill in mechanics, bandaging, strapping, padding, and physical therapy.

The podiatrist, even when treating a simple type of hard corn (heloma durum), looks for the causative factor that produces it, such as an ill-fitting shoe, some mechanical disturbance in the foot, or muscular imbalance in the leg. Many times this apparently simple type of excrescence, when the thickened epidermis is removed, proves to be a verruca or an ulcer which requires other types of treatment.

The verruca requires several treatments, and the podiatrist uses the conventional types: electrocoagulation, chemotherapy, or surgery. His skill in selecting the type of treatment and his specialized training in padding and shielding keep the patient ambulatory.

When an ulcer is encountered the podiatrist must determine the etiologic factor involved. If due to pressure, the cause is removed. If due to a systemic disturbance, a doctor of medicine is brought into consultation. The same is true of the callus (tyloma) and the soft corn (heloma molle). The simple burning pain which is apparent beneath the metatarsal heads and attributed to a callus (tyloma) often proves to be rheumatoid arthritis or some other systemic involvement. On the other hand, it may be a simple metatarsalgic syndrome. Here again the importance of keeping the patient ambulatory is involved.

Many so-called ingrown nails prove to be simple types of corn or callus most frequently found in the nail grooves, and radical surgery is contraindicated. When surgery is indicated, the importance of training the lateral edges over the nail flaps as the new nail grows out is most important to prevent a recurrence.

Surgical removal of the traumatic hypertrophied nails is seldom necessary; they are treated by the podiatrist prophylactically unless infected. Occasionally a subungual exostosis or an ulcer is found, and surgery is needed. Fungous nails respond slowly to prophylaxis and the administering of various fungicides.

Most of the patients seen by podiatrists have minor orthopedic conditions that require orthopedic treatment in conjunction with the removal of various types of excrescences. Many times a weak metatarsal arch will be the causative factor in a deep corn on the plantar surface of the foot. If the condition is acute, strapping will suffice; if chronic, an appliance is used. The same procedure is followed in weak foot, hammer toe, hallux valgus and many other cases in which bone, ligament or muscle is involved.

The neurovascular cases usually give a history of many pairs of shoes and a drawer full of arch supports, but none are comfortable to wear. Patients are treated in the usual manner except that extreme caution is exercised in all forms of treatment.

The skill, the dexterity, and the experience of the podiatrist provide for the ambulatory treatment of many foot conditions that otherwise would require hospitalization.

MEMBERSHIP

The following applicants for membership were duly elected to membership at the meeting of the Executive Board, June 30, 1952, in accord with Amendment XI, Section 2, of the Constitution and By-laws of the Society.

Active Members

James E. Boyland, 4325 49th Street, N.W.
Catherine W. Blumberg, Army Medical Center
Herbert J. Friedel, 2025 Eye Street, N.W.
Edna Myers Jeffreys, 1028 Connecticut Avenue, N.W.
John J. Leahy, 3730 University Avenue, N.W.
Goerges F. McCormick, 157 Irvington Street, S.W.
John O. Nestor, 2180 Key Boulevard, Arlington, Va.
John F. Stapleton, Georgetown University Hospital
Arthur B. Wein, 3636 16th Street, N.W.
Frank E. Wilson, 1523 L Street, N.W.
Allen Zellis, 2308 North 10th Street, Arlington, Va.

Associate Members

Leon L. Gallin, 3409 Tulane Drive, West Hyattsville, Md.
Murray Grossan, 8233 14th Avenue, Hyattsville, Md.
C. Albert Hudson, 603½ Queen Street, Alexandria, Va.
Jocelyn R. Newfeld, 3000 39th Street, N.W.
Bernard F. Peacock, 1726 13th Street, S.E.
Warren G. Preisser, 8418 New Hampshire Avenue, Silver Spring, Md.
Jorge G. Ramirez, 1779 Massachusetts Avenue, N.W.

Affiliate Member

Forrest M. Swisher, 915 19th Street, N.W.

News and Personals

The 38th Clinical Congress of the American College of Surgeons will open at the Waldorf-Astoria in New York City, September 22 and continue through September 26.

Sixty-two hospitals in the New York area are participating in an extensive program of operative clinics and demonstrations. Presbyterian Hospital has been selected as the source of telecasts of surgical procedures for the color television program to be shown at the Hotel Belmont-Plaza.

Dr. Alton Ochsner, of New Orleans, will give his Presidential Address, September 22. The Seventh Martin Memorial Lecture will be delivered by Dr. Donald C. Balfour, of Rochester, Minn., on the subject, "The Evolution of Gastric Surgery." New Fellows will be installed into the College and Honorary fellowships will be conferred at the convocation, September 26; Sir Cecil Wakeley, of London, President of the Royal College of Surgeons, England, will give the Fellowship Address.

The 17th Annual Assembly of the United States and Canadian Chapters of the International College of Surgeons will convene in the Conrad Hilton Hotel, Chicago, September 2–5. Two of the outstanding speakers will be from Great Britain, the Right Honorable Lord Thomas Horder, member of the Council of the British Medical Association, who will give the Convocation address, September 5, and Mr. Arthur Dickson Wright, a member of the Council of the Royal College of Surgeons, who will speak at the annual banquet, September 4.

The Annual Meeting of the Eastern Section of the American Trudeau Society will be held, October 31 and November 1, in Philadelphia. Headquarters for the meeting will be the Bellevue-Stratford Hotel. Members of the Society wishing to present papers are urged to communicate promptly with the Chairman of the Program Committee, Dr. Katherine R. Boucot, 311 Juniper Street, Philadelphia.

The 25th Annual Graduate Fortnight of the New York Academy of Medicine will be held, October 6–17, at the Academy, 2 East 103d Street, New York 29, N. Y. The theme of the meeting is "Hormones in Health and Disease." The registration fee is $10 for the entire program and $5 for the second week. Medical officers of the Armed Services, in uniform, will be admitted without charge. A program will be mailed upon request to the Secretary of the Graduate Fortnight, in care of the Academy.

Of special interest to candidates for admission to the examinations for certification by the **American Board of Obstetrics and Gynecology** is the following requirement, which was adopted at the recent annual meeting of the Board, in Chicago, June 7–13:

> Candidates currently applying for admission to the examinations for certification are required to submit a list of all patients admitted to the hospitals where they practice, for the year preceding their application or the year prior to their request for reopening of their application, with the diagnosis, pathological diagnosis, nature of treatment, and end result.

The next scheduled examination (Part I), written examination and review of case histories, for all candidates will be held in various cities of the United States, on Friday, February 6, 1953. Application for examination or reëxamination, as well as request for resubmission of case reports, must be made to the Secretary prior to November 1, 1952.

Applications forms for Appraisal of Incomplete Training, for Certification, and requests for Bulletins should be made to Dr. Robert L. Faulkner, Secretary, American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

Four manuals written for multiple sclerosis patients and just **published by the National Multiple Sclerosis Society** will be distributed through physicians to: (1) independently ambulatory patients; (2) patients ambulatory with aids; (3) wheel chair patients; and (4) more confined patients. The manuals

CALENDAR OF MEETINGS, JUNE 15–JULY 15

June 16	Board of Censors
June 17	Grievance Committee Physician Veterans of World War II
June 18	Board of Censors
June 19	Diabetes Association of D. C.
June 24	Tuberculosis Division, D. C. Health Department
June 25	Graduate Nurses' Association
June 26	Subcommittee, Medical Ethics and Deportment
June 27	Committee on Cancer Control Medical Advisory Committee to Laborers' Union
June 30	Executive Board Washington Heart Association
July 1	Civil Defense Blood Plasma Committee
July 8	Subcommittee on Chronic Alcoholism Medical Officers' Reserve Units
July 9	Subcommittee on Mental Health
July 10	Committee on Group Insurance
July 14	Committee on Industrial Medicine
July 15	Grievance Committee Subcommittee on Mental Health

were written by Dr. Edward E. Gordon, Medical Director of the Institute for Crippled and Disabled of Bellevue Medical Center, New York University. Contributing toward the printing of the manuals was the Metropolitan Life Insurance Company, in recognition of the fact that this chronic disease is an important public health problem. The patient manuals will be sent without charge to all multiple sclerosis patients at the request of a physician who will specify the appropriate manual needed for the patient. Inquiries should be addressed to the Washington, D. C. Chapter of the National Multiple Sclerosis Society, 1346 Connecticut Avenue, N.W., Washington 6, D. C.

The District of Columbia Society for Crippled Children announces that Dr. Winthrop M. Phelps will conduct **Cerebral Palsy Consultation Clinics** at 1767 Massachusetts Avenue, N.W., on the following days: Thursday, August 7, Friday, September 12, and Thursdays, October 9, November 6, December 4 and December 18. The clinics begin at 10 a.m. and usually last until 3 p.m. Doctors are invited to attend any of these clinics.

The Section on General Practice of the Medical Society announces that it has been successful in instituting a pick-up service for delivery to the D. C. Health Department of blood samples for Wassermans, sputums for tuberculosis, and gonococcal smears. Specimens will be picked up daily from the stations except Saturday and Sunday.

Peoples Drug Stores are coöperating in this service and have generously offered the use of their refrigerators for storing the specimens until they are called for. The stores to serve as key pick-up stations are as follows:

Store No.	*Address*
NORTHWEST	
9	3103 M Street
4	1150 7th Street
8	3220 14th Street
10	2481 18th Street
14	1144 Connecticut Avenue
38	5550 Connecticut Avenue
103	6213 Georgia Avenue
NORTHEAST	
5	806 H Street
107	3521 12th Street
25	1018 East Capitol Street
130	3956 Minnesota Avenue
20	2066 Rhode Island Avenue
SOUTHEAST	
126	1201 Good Hope Road
75	3000 Nichols Avenue
11	661 Pennsylvania Avenue

These stores will keep a supply of empty tubes for the convenience of physicians. No cultures are included in this service. They will still have to be taken directly to the Health Department and placed in the incubator.

Dr. Clayton B. Ethridge, Clinical Professor of Medicine at George Washington University School of Medicine, was elected President of the **Washington Heart Association** at its annual meeting in the Medical Society's library, June 30. Dr. Ethridge succeeded Dr. Bernard J. Walsh in office.

Dr. Hill Carter was elected Secretary. Other officers are: Robert Ramspeck, Vice President, and Raymond Ruppert, Treasurer. Dr. Andrew G. Prandoni, Messrs. William Hannan and Kenneth Birgfeld, and Mrs. C. Thomas Clagett were elected to the Board of Directors. Reëlected to the Board were Drs. Walsh, John W. Latimer, Jr., Bernard W. Leonard, John A. Reisinger, Harry Zehner, and Messrs. Ruppert and Frank Parsons.

The Providence Hospital Doctors Alumni Association held its third annual reunion, June 17. Following a breakfast, at which the doctors were guests of the Sisters of Charity who administer Providence Hospital, they participated in a scientific session. Prizes were awarded three physicians for outstanding papers presented at the meeting. Recipients were: Dr. O. Hugh Fulcher, Chief of Neurosurgery at Providence, and Drs. Stephens Oristian and Felix Paolucci, interns in surgery.

At the annual luncheon, held in the Nurses' Home, Dr. James M. Fadeley, Chief of Urology, was presented with a gold medal by Sister Celeste, Administrator, in recognition of his 32 years of service to the Hospital. Two retired physicians, Dr. Lester Neuman and Dr. Russell K. Hollingsworth, were also honored at the luncheon. In the afternoon the doctors adjourned to the Kenwood Country Club for an afternoon of sports.

At the reunion banquet in the evening, Dr. Philip A. Caulfield, President of the Association, presided. The Most Reverend Patrick A. O'Boyle, Archbishop of Washington, was the guest of honor. He thanked the physicians for their services to the Hospital and for oversubscribing their quota in the Hospital's million dollar campaign for a new building.

Dr. James P. Lyons was elected President of the Association. Other new officers elected were:

Dr. Louis J. Goffredi, *Vice President*; Dr. Jean E. Paquin, *Secretary*; Dr. Frank S. Pellegrini, *Treasurer*; and Dr. Thomas E. Curtin, *Historian*.

The Board of Directors of Garfield Memorial Hospital has announced that the School of Nursing, which was established in 1899, will not reopen this fall. Not only have the funds for operating the School been depleted but the Board feels that it would be unfair to recruit new students in view of the fact that the new Hospital Center, of which Garfield will be a part, has up to this time made no provision for conducting a nursing school. The new Center is scheduled for completion within three years. Students now in training will be transferred to other approved schools of nursing.

Since the announcement was made, the medical staff of the Hospital has appointed a committee to go over the whole matter with the Board of Directors. Ways and means of continuing to operate the School are being investigated.

Lt. Colonel Frank B. Rogers, MC, USA, has been appointed Director of the recently established **Armed Forces Medical Library.** Colonel Rogers has served as Director of the Army Medical Library since October 1949. The new institution, the largest of its kind in the world, will serve as a central medical library for the Army, Navy, and Air Force and as a National Library for medicine and related sciences. Its extensive facilities will be available to medical research and development contractors, other Governmental agencies, and to civilian physicians and medical scientists of all countries.

Several members of the Medical Society have spoken before lay groups in recent weeks:

Dr. Eugene J. McDonald addressed the Nobles and guests of Almas Temple, May 23, on "Potentialities of X-rays."

Drs. Addison M. Duval, Manson B. Pettit and Otis R. Farley, of the staff of St. Elizabeths Hospital, addressed the Congress Heights Citizens' Association, June 12. The physicians represented the Association at the all-day Conference of the United Community Services at the Shoreham Hotel, May 23. Dr. Duval reported on psychiatric problems of children, Dr. Pettit on problems of old age, and Dr. Farley on rehabilitation services.

Dr. Daniel L. Seckinger, District Director of Public Health, **and Dr. Oscar B. Hunter, Jr.,** participated in a round table discussion on District health problems in general, and the tuberculosis situation in particular, over Station WWDC, June 29. The program was sponsored by the Junior Bar Association.

Lt. Colonel Karl C. Corley and Major Clarence R. Hartman, who until recently were on active duty with the 382nd General Hospital near Osaka, Japan, have returned to civilian practice in Washington. Dr. Corley is resuming his practice of radiology with

Groover, Christie and Merritt at 1835 Eye Street, N.W. Dr. Hartman has been reappointed Assistant Clinical Professor of Medicine at George Washington University School of Medicine and Director of the Outpatient Department at the University Hospital. He held these two posts before he left for overseas duty.

The Executive Board of the Medical Society of the District of Columbia held its June meeting on the last day of the month at the home of the retiring Chairman, Dr. Raymond T. Holden. At the close of the dinner preceding the meeting, President Costenbader presented Dr. Holden with an engraved leather portfolio containing letters of appreciation for his services to the Society from the members of the Board. Dr. Holden expressed his appreciation of this gift.

President-elect Wallace M. Yater proposed a new subcommittee of the Committee on Public Health, to be called the Subcommittee on Chronic Alcholism. He submitted the following appointments to this subcommittee, the creation of which was approved by the Board: Dr. Earl H. Mitchell, Jr., *Chairman;* Dr. Anthony Zappala, *Vice Chairman;* Drs. M. Russell Edmonston, John D. Foley, Armond B. Gordon, Beveridge Miller, Lawrence E. Putnam, Louis H. Shuman and Charles Smith, D.D.S., *ex officio.*

In view of recent requests from the Director of Vehicles and Traffic for advice pertaining to physical examination of automobile drivers, the Board voted to reactivate the Traffic Committee which had last functioned in 1949–50. The original membership was reinstated, subject to review by the President-elect. The members are: Dr. Wallace M. Yater, *Chairman;* Drs. William M. Ballinger, Sterling Bockoven, William P. Herbst, Oscar B. Hunter, Jr., Arnold McNitt, Winfred Overholser, George C. Ruhland, Robert C. Rush and Allan E. Walker, Jr.

It was voted to make the Special Committee on Health and Accident Insurance a permanent committee of the Society, to be known as the Committee on Group Insurance.

Dr. Herbert P. Ramsey, Senior Delegate to the American Medical Association, called attention to the action of the AMA's Board of Trustees in proposing the establishment of a tenure of office for all committee members. The Board decided to request the Committee on Revision of the Constitution and By-laws to consider the advisability of establishing a tenure of office for each appointee.

The Board approved the creation of another committee, the Committee on Interprofessional Relations.

A new Finance Committee, made up of members of the Executive Board, to review expenditures of the Society, was authorized for the year 1952–53. They are: Dr. Herbert P. Ramsey, *Chairman;* Dr. William Ross Morris and Mr. Theodore Wiprud.

The Board voted to reappoint the Committee on Medical Education Fund which had been appointed at the meeting of the Board on January 28. The members are: Dr. Alan F. Kreglow, *Chairman;* Drs. Frederic G. Burke and Robert B. Nelson, Jr. Also reappointed to serve were the members of the Committee on Revision of the Constitution and By-laws, who had been appointed at the same meeting. They are: Dr. Walter Freeman, *Chairman;* Drs. William M. Ballinger, Frank D. Costenbader and Harry Zehner.

The Board was notified that Dr. Charles S. Ireland had been appointed Director of the Labor Medical Center, 1001 Fourth Street, N.W., and Dr. Eugene S. Gladsden, Co-Director of the Center, with the approval of the Medical Advisory Committee to the Laborers' Union at its meeting, June 27.

The Social Hygiene Society of the District of Columbia held its annual election of officers, June 12. Dr. William P. Herbst was reëlected President of the Society. Mr. Watson B. Miller was elected First Vice President and Mr. Victor H. Evjen, Treasurer. Reëlected were Mr. Albert W. Atwood, Second Vice President, and Mrs. P. C. Ellett, Secretary.

The name of the Hunter Laboratories at 915 19th Street, N.W., has been changed to the **Oscar B. Hunter Memorial Laboratory** in memory of its founder.

The Administrative Headquarters of the Office of Civil Defense of the District of Columbia has been moved from the National Guard Armory to the old Reno School at 4820 Howard Street, N.W., Washington 16, D. C. The telephone number is Ordway 9710.

New officers of the **Physician-Veterans of World War II** are:

Dr. William T. Spence, *President*; Dr. Ellis April, *Vice President*; and Dr. Alfred A. J. Den, *Secretary-Treasurer*.

The Section on Pathology and Laboratory Medicine elected officers at a meeting in the Medical Society's building, June 14. They are:

Dr. Thomas M. Peery, *Chairman*; Dr. Oscar B. Hunter, Jr., *Vice Chairman*; Dr. Harrison H. Leffler, *Secretary-Treasurer*.

Dr. Edward J. Beattie, Jr., Assistant Professor of Surgery and Director of the Surgical Research Laboratories of George Washington University School of Medicine, has been appointed to the medical staff of the Presbyterian Hospital in Chicago. He will also be Clinical Assistant Professor of Surgery at the University of Illinois College of Medicine.

Dr. Arthur A. Morris attended the **Eighth Congress of the International College of Surgeons,** which was held in Madrid, Spain, May 20–24, and presented a paper before the meeting on "Surgical Treatment of Psychomotor Epilepsy."

A scientific exhibit on "Tocographic Studies of the Human Uterus" by Dr. Samuel M. Dodek was on display at the meeting. Washington physicians were credited with several movies shown at the Congress: "Prolapse of the Uterus Complicating Labor," prepared by Dr. Dodek and Dr. Julius R. Epstein; "Stellate Ganglion Block in the Treatment of Acute Subdeltoid Bursitis," by Dr. Everett J. Gordon; and "Resection of Polyp by Sigmoidotomy," by Dr. Garnet W. Ault.

Dr. William Calhoun Stirling attended the three-day meeting of the British Association of Urological Surgeons in London, June 26–28. He was present at the annual dinner of the Association and presented his film on "Simplified Technic of Uretero-sigmoidostomy" before one of the scientific sessions. The same film was shown at the annual meeting of the American Urological Association in Atlantic City, N.J., on June 24.

Earlier Dr. Stirling attended the meetings of the Urological Section of the International College of Surgeons in Madrid, Spain.

Dr. John B. Ross, Associate Director of the Blood Grouping Laboratory at 1835 Eye Street, N.W., is severing his relations with the Laboratory and moving to Jacksonville, Fla., on September 1. Dr. Ross will be Medical Director of the Jacksonville Blood Bank and will establish a consulting practice in hematology.

Dr. G. Foard McGinnes, Regional Medical Consultant for the National Foundation for Infantile Paralysis, left for Houston, Texas, June 23, to act as special epidemic coördinator in the outbreak of poliomyelitis in that city.

Dr. Zigmond M. Lebensohn fulfilled two speaking engagements in June. He addressed the staffs of the Veterans Administrations Hospitals in Albuquerque, New Mexico, June 19, and in Marion, Indiana, June 23, on "The Management of Psychiatric Emergencies."

Captain David S. Gordon, who was on duty at Fort Belvoir, Va., until recently, has resumed his private practice in Hillcrest Heights, Md.

Dr. Samuel M. Dodek has been elected to membership in the International Medical Club of Washington, D.C., and the American Society for the Study of Sterility.

Lt. Colonel Raoul C. Psaki is Chief of Physical Medicine and Rehabilitation at the Letterman Army Hospital in San Francisco, Calif.

Dr. William W. Richards is also in San Francisco, having been transferred to the U. S. Public Health Service Hospital.

Dr. Sterling G. Mead was recalled to active duty with the Navy and has been assigned to the U. S. Naval Hospital in Jacksonville, Fla.

Dr. Charles F. Forester has accepted a post on the staff of the University of California Hospital in San Francisco.

Dr. Robert Hunter is taking a two-year residency at Hartford Hospital, Hartford, Conn.

Dr. Elizabeth Mattern, a Resident-Intern member of the Medical Society, has moved to Baltimore.

The Mask of Sanity. An Attempt to Clarify Some Issues About the So-Called Psychopathic Personality, 2nd ed. HERVEY CLECKLEY, M.D., Professor of Psychiatry and Neurology, University of Georgia School of Medicine, Augusta, Georgia. Price, $6.50. Pp. 569. St. Louis: Mosby, 1950.

The contact that the average physician has with the psychopath may not be particularly frequent but it can be exceedingly annoying. He may appear in the person of a patient who will not hesitate to call on the physician innumerable times but with no intention from the beginning of ever paying the bill; he may appear in the person of a slick and smooth-talking salesman who will try to sell a remarkable scheme for making easy money; not infrequently he may be found among his social friends who will ingratiate himself into the favor of acquaintances to the ultimate discomfort of all. These are the people who are commonly designated as psychopaths, and toward the understanding of these Dr. Cleckley devotes a whole book.

The author has long deplored the amazing mass of distorted concepts, diversity of opinion, and welter of confusion and equivocation that has surrounded the so-called psychopathic personality. This premise has served to isolate the psychopath from practical consideration and conceal him in a strange and gratuitous confusion. The author's avowed intention is to afford a "hearing" to what he calls "the forgotten man of psychiatry."

As explained in the preface to the second edition, the author's increased opportunity for enlightened discussion on the subject, improved acquaintance with the literature, additional experiences, and improved opportunities to observe a much more diverse group of patients suffering from this disorder, have all served to modify his original concepts, since the first edition, to a degree that made a revision in the accepted sense an impossibility, necessitating the writing of a new book.

This book attempts an explanation, clarification and interpretation of what, specifically, constitutes the psychopathic personality. It endeavors to clear up some of the existing confusion that has resulted in the practice of using the term "psychopathic personality" as a psychiatric grab bag, to embrace a number of heterogeneous mental disorders not actually belonging under such a title. It advocates a greater public understanding and recognition of the real importance and urgency of the problem, and the necessity of dealing with it in a more forceful manner.

A wealth of clinical examples serves to illustrate the common qualities, specific symptoms, and characteristic impairments of this group, as well as stressing the ubiquity of these patients. These clinical data, extremely interesting in their own right, could have been presented in a slightly more factual form. Some readers may find the author's seeming omniscience, the intrusion of personal views and predilection to wander unnecessarily down literary bypaths to philosophize, moralize, or tell another story, extremely tiresome as well as more aptly belonging to fiction than to a book of this kind. This was undoubtedly done to make for greater readability but it has in fact had the reader mentally stopping in the midst of examining these interesting specimens of "the psychopath" to go and chase butterflies.

In addition to the clinical examples given, the book also cites the contributions on psychopathy of many other authors, as well as the material available on the subject in the existing textbooks. The comparisons made and conclusions drawn, while seemingly unnecessarily reiterative throughout the entire book, are logical and consistent with his viewpoint. He doesn't hesitate to administer a verbal spanking to one existing textbook of fairly recent publication on its treatment of the subject, and states plainly his belief that a great deal of what has been written has only served to confuse the subject and confound the reader without in any way clarifying the situation.

The archaic concepts of 30 years ago that are being carried verbatim into present-day textbooks, the failure of agreement in the terminology in medical dictionaries as to the definition of the psychopath, plus the differences between official designation and the generally accepted usage of the word among psychiatrists, add weight to his view (in accord with Menninger's) that there is a practical need for a new official name to designate this group. The inference is that this might do much to dispel the veil of muddled thinking the present use of the term causes, resulting from the present bad habit of blanketing under that term a psychiatric miscellenia for which no other name can be found.

The contrasting distinguishing characteristics of the psychopath, the psychoneurotic, and the psychotic and the differences of their various symptomatic manifestations are discussed at length in 14 chapters. Seventeen chapters of the book are given over to a clinical profile in which the psychopathic personality is further defined and emphasized in a manner that should make these people who wear such a convincing "mask of sanity" more readily recognizable.

In the etiologic considerations, the author points out the determining factors he considers psychodynamically important and considers the particular difficulties attending analytic investigation and therapy, due to the elusiveness and evasiveness of these particular patients. Introduced is the label, semantic disorder for the well known concept that the so-called psychopath is unable to experience the *gestalt* the sum total of canny and uncanny emotions and other life reactions that are in the awareness or accessible to the awareness of other personalities.

He closes his arguments with a very realistic picture of the benefits to be gained by society as a whole if there were better organized facilities for the recognition, supervision and therapy of these patients. His view is that we have little to lose and a great deal to gain by a more objective handling of the entire problem. He advocates placing the psychopath into a distinct group, changing our existing medical, legal and social concepts concerning him, to conform with the urgent need of bringing these people into clearer focus in order to more effectively cope with the specific problems that they present, and which society has ignored. While pointing out the almost complete absence of methods to deal effectively with them, and the extremely poor therapeutic results in the cases receiving treatment at the present time, the author's views and arguments are sound concerning the results that could be achieved in a more realistic handling of the situation. Unfortunately, the author gives us virtually nothing of psychodynamics behind the behavior of the psychopath. Presumably, he leaves it to the more astute workers in the field.

If one agrees fully or not with his views, Dr. Cleckley has compiled a mass of pertinent information on the subject and presented it in a dynamic and readable fashion. The picture he draws leaves little doubt that the psychopath is worthy of a greater recognition, a medical reappraisal, and a more serious consideration than he has previously been afforded. This book should add to the greater understanding of him. The questions it asks, although many of them are as yet unanswered, and the thought it provokes should, in some measure, cast more light upon this "forgotten man."

Carol Carr
A. Zappala, M.D.

Liver Disease—A Ciba Foundation Symposium. Sheila Sherlock, M.D., F.R.C.P., Consulting Editor, and G. E. W. Wolstenholme, O.B.E., M.A., M.B., B Ch., Editor for the Ciba Foundation. Pp. 249, with 112 illustrations. Philadelphia: Blakiston, 1951.

This book comprises the proceedings of a conference held in the summer of 1950 on certain aspects of chronic liver disease. Workers in this field from all over the world participated and it is with a sense of pride that we record the many American contributions. The discussion ranged widely but the main focus of interest was on three topics.

The significance of flocculation reactions in liver disease was discussed. These apparently depend on a fall or qualitative change in the albumin, a rise or qualitative change in globulin, and the presence in the serum of patients with obstructive jaundice of a factor which may inhibit flocculation. Correlation of laboratory tests with histologic changes in the liver obtained by biopsy is not too exact and is in an early stage of study.

The mechanism of ascites was the second large topic. It is a manifestation which cannot be explained on one basis. In summation, portal hypertension, increased hepatic lymph flow, reduced sodium excretion by the kidneys, reduced colloid osmotic pressure of plasma, an antidiuretic hormone are factors operative in varying degrees in different cases of liver disease.

The etiology of cirrhosis was the third topic. Diet, alcohol, virus infection, and the carrier state were some of the factors discussed. Experimental work on fatty liver was also presented. That dietary deficiencies producing hepatic damage may also cause pancreatic disease is an interesting development.

Much of this material will appear in specialized medical journals but the idea of this type of symposium, with rather quick dissemination of the material presented, is excellent. All those concerned with teaching or with research of disease of the liver will welcome this book.

Irving B. Brick, M.D.

Peptic Ulcer: Clinical Aspects, Diagnosis, Management, published under the auspices of the American Gastroenterological Association. Editor, David J. Sandweiss, M.D., F.A.C.P., Associate Attending Physician, Division of Internal Medicine, Harper Hospital, Detroit, Michigan. Price, $15.00. Pp. 790, with 164 figures. Philadelphia: Saunders, 1951.

This book was published under the auspices of the American Gastroenterological Association with the idea of presenting an authorative source of current thinking on the diagnosis and treatment of peptic ulcer. Its 790 pages contain 66 chapters written by 77 eminent authorities. Some of the subjects covered are anatomy, physiology, etiology, pathology, diagnosis and treatment. Because of the many authorities participating, the book lacks unity in some respects. However, many of the chapters afford brilliant reviews of their subjects and clarify points of confusion in the literature. The chapters on the mechanism of pain, the relation of experimentally produced ulcer and the disease in man, and the evaluation of therapy were especially noteworthy. This book and the recent treatise by Ivy, Grossman and Bachrach comprise the only thorough reviews of an important and frequent disease in the 25 years elapsing since the publication of "Gastric and Duodenal Ulcer" by Hurst and Stewart.

Irving B. Brick, M.D.

WILLIAM RAYMOND MOULDEN, M.D.
(1877–1952)

Dr. William R. Moulden, Washington surgeon for 52 years, died, July 4, 1952, at his home, 3401 Lowell Street, N.W. He had been in ill health for several years.

Dr. Moulden was a native Washingtonian, born January 16, 1877, the son of Aquila F. and Mary Elizabeth Raymond Moulden. He attended the public schools in Washington. He graduated from Columbia University (now George Washington University) Medical School in 1900. The following year he interned at Emergency Hospital, and for three years served as Surgeon-in-charge of the Bilibid Prison Hospital in Manila, P. I. While in the Philippine Islands he was appointed by Governor General William Howard Taft, who later became President, to organize all facilities in order to fight an epidemic of cholera. Dr. Moulden accomplished his mission in 30 days.

Dr. Moulden was on the visiting staff of Emergency and Georgetown Hospitals for many years.

He was a Life member of the Medical Society of the District of Columbia, a member of the American Medical Association, and a member of the Montgomery County (Maryland) Medical Society.

He is survived by his wife, Mrs. Mary Taylor Moulden; a son, William H. Moulden, Jr., of Bethesda, Md.; two daughters, Mrs. Paul P. Blackburn, Jr., of Arlington, Va., and Mrs. Robert A. Brand, of The Hague, Netherlands; and two brothers; Elmer Lyman Moulden, of Montana and John Fletcher Moulden, of Riverdale, Md.

J. WARD MANKIN, M.D.
(1874–1952)

Dr. J. Ward Mankin, Washington surgeon who had recently retired from practice because of ill health, died suddenly at his summer home at Beverly Beach, Maryland, June 27, 1952. His Washington home and office were located at 2030 16th Street, N.W.

Dr. Mankin was born in Marshes, West Virginia, February 20, 1874, the son of James A. and Agnes Callaway Mankin. He studied at Marshall College in Huntington, W. Va., and received his degree in medicine from the College of Physicians and Surgeons in Baltimore in 1906. He interned at West Virginia State Hospital.

Dr. Mankin practiced medicine in Thurmond, W. Va., from 1906 until 1915, when he began his practice of surgery in the District of Columbia. While in Thurmond he was surgeon for the Chesapeake and Ohio Railway. He was also surgeon for several coal companies during those years.

During World War I, from 1917 to 1920, Dr. Mankin was Superintendent and Chief Resident Surgeon at Emergency Hospital. He was on the staffs of Emergency, Sibley, Casualty and Doctors Hospitals during his practice in Washington.

He was a member of the American Medical Association and an Active member of the District Medical Society since 1916. He was a life member of the Elks and the Shrine, and a Scottish Rite Mason.

Surviving are his wife, Mrs. Virginia Turner Mankin; a son, Dr. H. Haven Mankin, who practices in Washington and is an Active member of the District Medical Society; and a brother, Ash Mankin, of Beckley, West Virginia. Two grandsons are physicians.

FREDERICK YOUNG DONN, Phar. D., Ph.C., M.D.
(1885–1952)

Dr. Frederick Young Donn, a native Washington physician, died at his home, 4800 8th Street, N.W., June 7, 1952, following a long illness.

Dr. Donn's family had lived in Washington, D. C., for three generations. Born March 30, 1885, he was the son of Henry T. and Nancy C. Middlekauff Donn. He attended the Washington schools and received his degree in pharmacy from the old National College of Pharmacy in 1904. He continued his studies at the Medico-Chirurgical College of Philadelphia, Pa., and graduated as pharmacist-chemist in 1908.

A few years later Dr. Donn decided to study medicine and enrolled in George Washington University, receiving his medical degree in 1915. He interned at Casualty and Sibley Hospitals, and opened his office for private practice in the fall of 1916.

He was elected to Active membership in the Medical Society of the District of Columbia in 1917. He was also a member of the George Washington

University Medical Society. He belonged to the Petworth Lodge of Masons and Rock Creek Episcopal Church.

Survivors are his wife, Mrs. Ann Preston Farmer Donn; two sons, Dr. Frederick Y. Donn., Jr., an Associate member of the District Medical Society, and Private Harvey Tudor Donn, USA, of Fort Devens, Mass.; a daughter, Mrs. Maryann D. Smith of Fairfax, Va.; and a sister, Miss Ruth A. Donn'.

BEN DAVID CHINN, Ph.B., Ph.D., M.D.
(1904–1952)

Dr. Ben David Chinn, specialist in internal medicine, died unexpectedly, July 7, 1952, at Georgetown Hospital. His home address was 6141 33rd Street, N.W.; his offices were located at 1726 Eye Street, N.W.

Dr. Chinn was born in Manchester, England, September 22, 1904. He came to the United States with his parents when he was 9 years old and was educated in the public schools of Chicago. He received the degree, Bachelor of Philosophy, from the University of Chicago in 1922. In 1935 he received his doctorate in bacteriology and public health from the same University. He taught at the University while engaged in postgraduate study, from 1932 to 1935, and the next two years at the medical College of South Carolina.

Dr. Chinn returned to the University of Chicago to study medicine and received his medical degree in 1940. He interned at St. Elizabeths Hospital, from 1940 to 1941, and was Assistant Medical Officer at the same hospital from 1941 to 1942. From 1943 to 1947 he was clinician at the Polk Health Center, and for about six months in 1945 he was Acting Director of the Bureau of Venereal Diseases of the District Health Department.

He was a member of the American Medical Association, the Society of American Bacteriologists, an Active member of the Medical Society of the District of Columbia since 1944, and a member of the Medical Society of St. Elizabeths Hospital. He had contributed a number of articles to medical publications.

He is survived by his wife, Mrs. Dorothy Mednick Chinn; a young son and daughter, Aaron and Mary Judith; two sisters, Miss Raye Chinn and Mrs. Jesse Simon, both of Chicago; and a brother, Simon Chinn, also of Chicago.

OLIN WEST, M.D.
(1874–1952)

Dr. Olin West, for 23 years Secretary and General Manager of the American Medical Association, died, June 20, 1952, in Nashville, Tennessee, where he had lived since he retired in April, 1946.

Dr. West was born in Gadsden, Alabama, July 12, 1874. He graduated from Vanderbilt University School of Medicine in 1898 and for 12 years practiced medicine in Nashville. For 15 years he was a member of the faculty of Vanderbilt University, first as an instructor and later as assistant and Associate Professor in Chemistry. In 1910 he became Director for the Rockefeller Sanitary Commission and the International Health Board of Tennessee. He was Secretary and Executive Officer of the Tennessee State Board of Health from 1918 until 1922.

Dr. West went to Chicago to serve as Field Secretary of the AMA in 1922. In the same year he was appointed Acting Secretary by the Board of Trustees and the following year, Secretary of the Association by the House of Delegates. In 1924, following the resignation of Dr. George H. Simmons, he succeeded to the position of General Manager and held the two positions until he retired.

He was unanimously elected President-elect of the AMA at its 95th Annual Convention in San Francisco in 1946 but resigned in 1947 because of ill health.

He was a former President of the Middle Tennessee Medical Association, a Past Secretary of the Tennessee State Medical Association and former editor of its journal. He was a member of the Chicago Institute of Medicine, the Nashville Academy of Medicine, and the University Club of Chicago.

On March 3, 1948, the Medical Society of the District of Columbia conferred Honorary membership upon Dr. West in recognition of his long years of service to the American Medical Association. In presenting him to the Society for election, the Executive Board stated: "There are few officials who have served the Association more unselfishly than Dr. West. It is therefore not surprising that he is beloved by thousands of physicians who looked upon him as the symbol of strength in a troubled medical world."

Dr. West is survived by his wife and two sons, Robert and Olin, Jr. The family resides at Helena Court, Belle Meade, Nashville, Tenn.

GEORGE WALTER McCOY, M.D., F.A.C.P.
(1876–1952)

Dr. George Walter McCoy, internationally known scientist, and from 1915 to 1937 Director of the National Institute of Health, principal research facility of the United States Public Health Service, died April 2, 1952, in Washington, D. C., after a short illness.

One of the Nation's top authorities on leprosy, Dr. McCoy was also widely recognized for his contributions in such fields as plague, tularemia, psittacosis, post-vaccination complications, and biologics control. He entered the Public Health Service in 1900, headed the U. S. Plague Laboratory in San Francisco from 1908 to 1911, and was Director of the Leprosy Investigation Station in Hawaii from 1911 to 1915. In the latter year he became Director of the Hygienic Laboratory, later renamed the National Institute of Health. At that time the organization had less than 100 employees, as compared with more than 600 when Dr. McCoy retired as Director in 1937.

In collaboration with Dr. Charles W. Chapin, Dr. McCoy isolated, identified, and cultivated the causative organism of tularemia.

A painstaking and skeptical investigator, stimulating teacher, and austere critic, Dr. McCoy contributed much to the development in this country of the general concept of freedom for the individual investigator. He insisted on carefully indoctrinating young scientists in the experimental method and always emphasized the necessity for controlled investigation.

Dr. McCoy was born in Cumberland Valley, Pennsylvania, June 4, 1876, and received his M.D. degree from the University of Pennsylvania School of Medicine in 1898. After entering the Public Health Service in 1900, he was assigned to field projects on the West Coast and Hawaii for 13 years. It was during his tour of duty at a Marine hospital in San Francisco that he became interested in Hanson's disease (leprosy). In 1937, a year before his retirement from the Public Health Service, he conducted a Nation-wide epidemiologic study of the disease.

Following his retirement, Dr. McCoy served for 9 years at Louisiana State University as Professor of Preventive Medicine and Public Health, and in 1945–46 he was Acting Dean of the School of Medicine. In 1948 he retired from university work and returned to Washington.

Dr. McCoy's honors included the Sedgwick Memorial Medal of the American Public Health Association and selection as Cutter Lecturer at Harvard University in 1915. He was affiliated with many organizations, including the Public Health Special Advisory Committee on Leprosy, the Permanent Standards Commission of the Health Section of the League of Nations, the National Board of Medical Examiners, the Council on Pharmacy and Chemistry of the American Medical Association (since 1916), and the American Epidemiological Society, of which he was Past President. He was the author of nuerous papers, particularly on tularemia, leprosy, plague, psittacosis, and biologics control.

JOSEPH W. MOUNTIN, M.D.
(1891–1952)

Dr. Joseph W. Mountin, Chief of the Bureau of State Services of the United States Public Health Service, died unexpectedly at the Naval Medical Center in Bethesda, Md., April 26, 1952. He was appointed to the post of Bureau Chief on November 1, 1951, with the rank of Assistant Surgeon General.

Dr. Mountin had a distinguished career with the Public Health Service and was widely known as the "father" of many Service programs. His duties had taken him to all parts of the continental United States and its Territories, and he had traveled widely in Europe and the Far East on missions for the Service.

He was a special health adviser to the Bhore Commission for the Government of India in 1947. During 1949 he was Adviser on Health and Welfare to the Economic Mission to Colombia, South America, sponsored by the International Bank for Reconstruction and Development. At the time of his death, he was Public Health Service director of the evaluation of the ten-year health and sanitation program of the Institute of Inter-American Affairs.

Dr. Mountin was born in Hartford, Wisconsin, October 13, 1891. He received his medical degree from Marquette University, Milwaukee, in 1914; after completing internships at the Milwaukee County Hospital and at the Chicago Lying-In Hospital he engaged in postgraduate study in Boston, New York, and other eastern cities. Before joining the Service, he organized and directed the Marquette University Clinic.

He began his career with the Public Health Service during World War I in work in extra-cantonment sanitation in military areas throughout the United States. His subsequent assignments included work in Public Health Service hospitals and in state and local public health departments. He was director of the Division of Public Health Methods from 1937 to 1939 and of the States Relations Division from 1943 to 1947, when he assumed the post of Associate Chief of the Bureau of State Services.

As Chief of the States Relations Division, Dr. Mountin administered the program of Federal financial grants-in-aid to the states for public health purposes. During World War II he also administered a Nation-wide emergency health and sanitation program for extra-cantonment and critical war areas.

Two of the major field stations of the Bureau of State Services, the Communicable Disease Center at Atlanta, Georgia, and the Arctic Health Research Center at Anchorage, Alaska, were established largely through Dr. Mountin's efforts.

The author of numerous studies and monographs on preventive medicine, public health administration and medical care, Dr. Mountin was a Diplomate of the American Board of Preventive Medicine and Public Health, and a member of the American Medical Association and the Southern Medical Association. He was Vice Chairman of the Section on Preventive and Industrial Medicine and Public Health of the AMA in 1941 and 1942, and Chairman in 1943–44; a member of the Executive Board of the American Public Health Association and the Board of the National Organization of Public Health Nursing; and he had served on many official committees of other health organizations.

Because of the variety of his experience, he became known as an authority in a wide range of public health fields, from environmental health programs such as sanitation, water pollution control and industrial hygiene, to public health nursing, public health education, and the control of chronic diseases. As a member of the Intergovernmnetal Committee on Aging and Geriatrics, Dr. Mountin most recently had interested himself in the problems of chronic disease and the aging U. S. population.

Dr. Mountin is survived by his wife, Mrs. Genevieve Mountin; a daughter, Joan, and two sons, David and Daniel. The family reside at 3637 Brandywine street, N.W.

CHARLES SUMNER ROBBINS, M.D.
(1876–1952)

Dr. Charles S. Robbins, retired Washington physician, died, June 12, 1952, in Casualty Hospital, six days after he was found unconscious in his home at 4900 Third Street, N.W. For many years Dr. Robbins had been employed by the Veterans Administration.

Dr. Robbins was born in Knox County, Illinois, May 19, 1876. He graduated from Rush Medical College in 1901 and interned it Chicago Lying-in Hospital and Dispensary the following year. He was resident physician at Milwaukee Sanitarium, Wauwatosa, Wisconsin, in 1902 and Instructor in Gynecology at Policlinic Postgraduate Medical School in Chicago during the winter months of the same year. He practiced medicine in Chicago until 1904, when he secured his license to practice medicine in the District of Columbia.

Dr. Robbins was commissioned Captain in the Medical Corps of the U. S. Army in 1917 and served with the American Expeditionary Force in France. From 1919 to 1922 he was on duty as a medical officer with the Hospital Division of the U. S. Public Health Service, and from 1922 to 1935 he served in the same capacity in the Hospital Division of the Veterans Administration. He held the rank of Major in the Medical Reserve Corps until he was placed on the Inactive List.

Dr. Robbins was elected an Associate member of the District Medical Society in 1928. He was an Active member of the Society from 1945 to 1949. He was also a member of the Reserve Officers Association.

His wife, Mrs. Louise Peiffer Robbins, survives him. There are no other known relatives.

Cerebral Hemodynamics—Bessman et al

(*Continued from page 425*)

SUMMARY

The cerebral hemodynamics and metabolism in 2 cases with cerebral arteriovenous anomalies are reported, and the significance of the findings is discussed. Pre- and postoperative studies are presented in the second case, the postoperative values for cerebral blood flow and cerebral vascular resistance showing a return to normal. The value of the cerebral blood flow technic as an aid in clinical diagnosis of cerebral arteriovenous fistula is indicated.

N.B. We wish to thank Dr. Theodore Bisland for supplying photographs of the 2 X-ray films. The technical assistance of Miss Marie Rosenberg and Mr. William Young is gratefully acknowledged.

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Use and Abuse of New Drugs—Pulaski, Forster and Trenis

(*Continued from page 438*)

from the use of sulfonamide drugs or antibiotics alone or in combination. Penicillin aerosols combined with bronchodilator and vasoconstrictor drugs are often quite helpful.

Q. *What is the present status of the use of enzymes in thinning pleural collections of fluid?*

A. The drugs, streptokinase-streptodornase and trypsin, have a definite lytic effect on intrapleural collections of fluid. There is no agreement about their efficacy, some reports being more favorable than others. The earlier they are used the more successful the results. They are helpful in clotted hemothorax, and in various types of empyema. If good lytic action results, it will be evident in a short period of time. They are usually followed by febrile episodes which may be lessened by giving antipyretics and antihistaminics before and after the instillations. If drainage is established through aspiration of fluid and the lung promptly reëxpands and good function results, the outcome is satisfactory. These drugs are not bactericidal, but in the case of empyema may permit better action of the body defense mechanisms as well as more effective results with chemotherapeutic agents used in addition to the enzymes. Surgical intervention should not be delayed if it is evident in a short while, perhaps after 2 or 3 injections of the enzymes within a few days, that such treatment is not beneficial.

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INHALATIONAL THERAPY*

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IN RECENT years the therapeutic management of many forms of infectious pulmonary disease with or without associated bronchospasm has been effectively enhanced by the inhalational administration of aerosolized antibiotics, bronchodilators, and vasoconstrictors. Indeed, this route offers the greatest and quickest relief possible in primary bronchospastic disorders when infection does not exist.

Aerosols are fine suspensions of liquids or solids in air or oxygen. Depending upon their particle size, they may be deposited at any site in the respiratory tree. Only nebulizers designed to generate droplets or particles the majority of whose size is 1 to 3 micra are efficient enough for aerosolization of the parenchyma of the lungs. Particles smaller than these are lost in the expired air, whereas larger ones are deposited on the tongue, posterior pharynx, trachea and larger bronchi without ever reaching the lung parenchyma itself. Recommended for this purpose are the Vaponefrin and DeVilbiss no. 40 nebulizers. Penicillin dusts of micraparticle size (Schenley and Lederle) when used in proper nebulizers may be satisfactory, but are uncommonly used.

PHYSICAL AND PHYSIOLOGIC CONSIDERATIONS

To understand the rationale of aerosol therapy in certain types of bronchial and pulmonary disease certain fundamental principles should be emphasized:

1. The normal bronchial tree has both ventilatory and drainage functions.

2. The bronchi and bronchioles lengthen and widen during inspiration. Therefore, in partial bronchial obstruction symptoms and signs are usually first manifested during expiration. The principal symptom is wheezing, with or without dyspnea. The principal physical signs are musical râles and a prolonged expiratory phase. The greater the obstruction, the more predominant are the sibilant or high-pitched râles and the longer the expiratory phase.

3. Drainage of the bronchial passages is accomplished by the combination of rhythmic contractions, the normal ciliary action of the lining epithelium, the elastic recoil of the lungs, and the piston-like action of the diaphragm during expiration.

4. The anatomy of the upper respiratory tract permits the directing of an inspired aerosol to the diseased lower respiratory structures, namely, the medium and small-sized bronchi, bronchioles,

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* Prepared for the forthcoming Fourth Edition of Yater's "Fundamentals of Internal Medicine."

and the alveolar sacs, where the droplets are topically applied and then absorbed.

5. The internal surface area of the entire lung parenchyma is 500 times that of the body skin surface. Because of this, an aerosol of optimal dosage is absorbed into the systemic circulation as rapidly as by infusion. The resulting blood levels vary more or less inversely with the extent of the disease, the degree of fibrosis, and the amount of emphysema.

6. Parenteral administration of antibiotics, even when given in dosage sufficient to produce high blood levels, is often inadequate to effect improvement, control, or to cure certain bronchopulmonary diseases. An inhaled aerosol deposits the antibiotics locally along the respiratory tree. Extra deposition occurs where there are mucus, mucopurulent material, or other obstructing factors, because these act as baffles or traps, thereby insuring sterilization of accessible and susceptible organisms. This often cannot be done by reliance on the parenteral route. The aerosol does not penetrate encapsulated or fibrotic areas. It must be stated, however, that the broad spectrum antibiotics given orally or intravenously are far more efficient than penicillin and streptomycin and therefore should be tried first before aerosolization is considered.

In partial bronchial obstruction, when natural forces such as coughing, ciliary movement, or postural drainage (carefully directed to conform with the location of the lesion) are inefficient or ineffective in draining the involved lung segments, one must first aerosolize with bronchodilators and vasoconstrictors before aerosolizing with the specific antibiotics. Oral administration of liquefying expectorants like potassium iodide in high dosage and with adequate fluid intake facilitate expectoration of secretions, and therefore permit the deeper penetration of the specific aerosol.

In complete bronchial obstruction bronchoscopy is mandatory before any aerosolization would be justified or effective in reaching the segments distal to the blockage.

8. The presence of inspissated secretions, necrotic tissue, fibrosis, and avascularity of the diseased portions of the lung often precludes an aerosol from coming in contact with the offending organism. Certain detergents by virtue of their emulsifying and surface tension-reducing properties can be helpful if used as the diluent for the antibiotic. They may also synergistically enhance the bacteriostatic activities of the antibiotics.

9. Broad spectrum antibiotics are not yet to be recommended for aerosolization because their irritating side effects have not been eliminated.

10. CAUTION! *No antibiotic aerosol should ever be used unless there is reasonable evidence of purulent infection of bacterial origin being present. To do so in allergic individuals without considering or anticipating possible serious undesirable side reactions is extremely hazardous. To expect a good clinical response where there is no clear indication for the use of a specific aerosol is faulty judgment. and any failure should not be used as evidence against a valid technic.*

INDICATIONS FOR INHALATIONAL THERAPY

The indications for this route of therapy are:

1. Bronchial asthma, secondary bronchospasm, obstructive pulmonary emphysema
2. Bronchiectasis
3. Sinobronchial infection
4. Suppurative bronchitis and tracheo-bronchitis
5. Lung abscess, early
6. Prophylaxis against atelectasis
    a. Pre- and postoperatively in thoracic surgery
    b. Pre- and postoperatively in upper abdominal surgery
7. To provide another possible parenteral route for the administration of therapeutic agents for other pulmonary or nonpulmonary conditions.

Bronchial Asthma, Secondary Bronchospasm, Obstructive Pulmonary Emphysema. The use of an aerosol bronchodilator (Vaponefrin, Isuprel) in a good hand nebulizer (Vaponefrin) is the treatment of choice for an acute attack of asthma or attacks of dyspnea due to bronchospasm associated with inflammatory bronchial disease or obstructive pulmonary emphysema. In bronchial asthma the relief, experienced within seconds after using 6 deep inhalations, is free of undesirable side effects. There is no simpler, cheaper, nor faster method of preventing the insidious "build-up" of respiratory distress with its attendant accumulation of glue-like secretions and increasing panic. Used prophylactically 3 or 4 times daily as above in bronchial asthma during an upper respiratory infection or allergic season, this technic often forestalls or prevents a serious asthmatic episode. Used in the same manner daily along with oral bronchodilators and potassium iodide in obstructive pulmonary emphysema it gives comfort never before realized and in addition greatly decelerates the chronic course of this disease. In the latter condition this routine should be continued for life in order to postpone or prevent the more serious complications of unrelieved emphysema. The vital capacity and work tolerance are often significantly improved.

It is important to recognize that the wheezing dyspnea and pulmonary insufficiency observed in many forms of suppurative lung disease are due more often to the associated bronchospasm than to the disease itself. It causes more distress than the underlying infection, and fortunately it is a quickly reversible factor in that it responds effectively to the inhalational administration of bronchodilators and vasoconstrictors.

Only rarely should aerosolization of an antibiotic be used in this group, and only with extreme caution (coincident use of an aerosol bronchodilator and intramuscular administration of adrenalin-in-oil), and only after antibiotics used by other routes have failed to clear up an associated underlying bronchial infection.

Bronchiectasis. Surgical resection is the treatment of choice in properly selected cases. However, if aerosol therapy is used preoperatively in these cases, the amount of infective secretions is reduced and the bronchial tree is more effectively sterilized. In those cases in which for any reason operation is inadvisable, or in which surgery is refused, aerosolization in the hospital or at home markedly reduces the morbidity and discomfiture of the afflicted. Broad spectrum antibiotics should be given a course before beginning the more time-consuming aerosol therapy. They are often completely satisfactory. If, however, because of their undesirable side effects or their expense in such a chronic disease, or because they are ineffective, one should proceed with inhalational therapy. Although it has been proved unwise to use the broad spectrum antibiotics concurrently with aerosol penicillin and streptomycin because they appear antagonistic, it is nevertheless recommended that the triple sulfonamide drugs and/or penicillin be used simultaneously by oral or parenteral routes. Streptomycin is slowly absorbed and remains at the site of deposit for long periods. Recurrent pneumonitis in the involved segments may respond remarkably to the inhalational administration of appropriate drugs. Oral and other parenteral routes of administration of the same specific drugs frequently fail to effect any significant clinical improvement, or the improvement is less than that obtained by inhalational therapy. Relapses and periodic flare-ups are the rule in this disease, and such treatment therefore must necessarily be periodic according to the clinical need. The physician may help the patient avoid such exacerbations if he himself educates his patient to expect them to follow the common cold, chilling, or other unrelated stresses, and to be ever ready to put his prophylactic program into effect. This should include aerosol therapy. It is well to emphasize the fact that remarkable clinical improvement may follow without significant blood levels of the antibiotic ever being obtained. By parenteral routes high blood levels are often reached but levels in the sputum remain low. Postural drainage, even when properly executed following the bronchodilator phase of aerosolization, often fails to facilitate the expectoration of sputum. When little or nothing is gained by this very uncomfortable procedure, it should be stopped.

Sinobronchial Infection. Acute sinusitis is often most effectively treated by aerosolization of a vasoconstrictor and penicillin by simply connecting a special nasal attachment to the conventional vaporizer. The follow-up administration of the indicated nose drops in the proper head low-lateral position may maintain good drainage. It must be remembered that infected sinuses may precede or accompany bronchial disease without attracting too much attention. In such a case to aerosolize the lungs and not the nasal passages and sinuses might make the difference between a long and short remission of the bronchial symptoms.

Suppurative Bronchitis and Tracheobronchitis (see Physical and Physiologic Considerations, item 10). If there is purulent sputum or other evidence of bacterial infection, aerosol bronchodilators and penicillin may afford a rapid relief of distressing dyspnea, wheezing and cough. Occasionally, however, this procedure may increase the bronchial irritation or spasm and should be promptly discontinued. Steam inhalations used intermittently add greatly to the patient's comfort.

Lung Abscess. In early or acute lung abscesses or acute suppurative pneumonias (staphylococcal and streptococcal) aerosolization of antibiotics has proved to be remarkably successful in quickly reducing the toxicity and in effecting clinical and roentgenologic clearing in a relatively brief period. It has markedly reduced the need for surgical intervention. Once epithelialization of the abscess has taken place, probably in about 6 weeks, surgical drainage or segmental excision is usually the treatment of choice, but aerosolization should be continued pre- and postoperatively.

Prophylaxis against Atelectasis. The most important factors underlying postoperative atelectasis are (a) the presence of infection in the bronchial tree, (b) the aspiration of, or the inability to expectorate secretions during or immediately after anesthesia, and (c) the relative immobility of the chest due to voluntary splinting because of pain or prolonged narcosis.

In thoracic and upper abdominal surgery it is proposed that preoperative aerosolization of bronchodilator-antibiotic mists be used to reduce the flora of the bronchial tree and to aid in the drainage of excess secretions. Postoperatively the same applies, but, in addition, the technic mechanically affords a periodic compulsory deep breathing exercise and thereby reduces the hazards attendant upon immobility of the lower chest.

To Provide Another Parenteral Route. This route of administration through the capillary bed of a normal lung gives excellent blood levels, and can always be used as an alternate or adjunctive route for the administration of a suitable antibiotic in the case of a patient who is unduly disturbed by the discomfort of injections or other undesirable side effects. At the moment it is rarely used but there is every expectation that in the near future this simple technic will be used in the administration of old and new chemotherapeutic agents, enzymes, endocrines, antibiotics, antibodies, radiologically opaque solutions, bacteriophage, radioactive isotopes, and other diverse substances.

Bronchodilators and Vasoconstrictors

Vaponefrin, Isuprel, and epinephrine (1:100) are used primarily for their ability to dilate the bronchi by virtue of their sympathomimetic effect on the bronchial musculature and less because of their vasoconstrictive properties on the bronchial mucosa. Vaponefrin is essentially a racemic form of epinephrine but is a more potent and longer acting drug with less hypertensive effect. Although both Vaponefrin and epinephrine have vasoconstrictive properties, Neo-synephrin is the vasoconstrictor of choice of the bronchial mucosa. It reduces edema without undesirable side effects but has little relaxing effect on the bronchial musculature. Therefore, if both bronchodilator effect and mucosal vasoconstriction are desired, the two drugs must be used together. Essential hypertension is not necessarily a contraindication of the use of these drugs.

If one inhalational treatment exceeds more than the usual 30 minutes, or even less in a weakened patient, the above-mentioned drugs in their proper dosages may be used as the diluent for the antibiotic instead of normal saline solution. All three of these drugs tend to reduce the speed of absorption of the antibiotic, thereby permitting prolonged local action on the diseased bronchial mucosa.

Equipment

For the average case requiring inhalational therapy only a very simple apparatus is required. More elaborate equipment is occasionally needed because of the inability of the patient to coöperate, or because of undesirable side reactions.

Materials:

A. Nebulizer, glass or plastic (1 of below)
   1. Vaponefrin (Asthmanefrin) vaporizer
   2. DeVilbiss No. 40 Nebulizer or No. 640 Nebulizer Combination
   3. Nasal attachment (glass with rubber connecting tube) for sinus treatment only

B. Source of compressed air or oxygen (1 of below)
   1. Hand bulb (practical for treatment of brief duration only; 200 compressions would be necessary for 1 treatment)
   2. Oxygen tank with gauge and outflow control valve
   3. Hand pump set (DeVilbiss No. 640, which includes nebulizer, rubber tubing with control valve, nasal attachment, L-tube, and hand pump for treatment in supine position)
   4. Tire pump, horizontal type

C. Rubber tubing (5 feet) with Y-tube (if not included in above equipment)

D. Specific therapeutic agents
   1. Antibiotics
      a. Penicillin, crystalline or calcium salt, 50,000–100,000 units per c.c. of normal saline solution or soluble 50,000 unit tablets (labeled "for inhalation only")
      b. Streptomycin, 250 milligrams per c.c. of normal saline solution
   2. Bronchodilators
      a. Vaponefrin (Solution A) 0.3–0.4 c.c.
      b. Isuprel HCL (1:100) 0.3 c.c.; (1:200) 0.5 c.c.
      c. Epinephrine HCL (1:100) 0.3–0.4 c.c.
   3. Vasoconstrictors
      a. Neosynephrine (0.25–1 per cent) 0.5–1.0 c.c.
   4. Detergents
      a. Zepherin chloride (1:1,000, aqueous solution)

Management and Technic

Once the diagnosis is made and inhalational therapy decided upon, the following plan will be found to be simple and adequate for the best possible results.

Rules:

1. The patient is informed of the nature and pathogenesis of his disease and is apprised of the goal to be reached by aerosol therapy.
2. The technic of aerosol therapy and the cleaning of equipment are carefully described and demonstrated to the patient.
3. All the medication and equipment are kept at the patient's bedside so that he will learn how to use them himself.

Orders on the chart:

1. Smear and culture sputum for predominating organisms
2. Measure 24-hour sputum volume (this is best done by the patient with a graph for charting at the bedside; note color and quantity before discarding each day)

3. Vital capacity determinations (average of 3 trial runs daily with McKesson-Robbins portable vital capacity apparatus or other)
4. Place in vaporizer for inhalation q.i.d. after meals and at bedtime the following:
    a. Penicillin, 100,000 units (aqueous solution) or 2 soluble tablets
    b. Streptomycin, 0.25 Gm./c.c.
    c. Normal saline, Neosynephrine, Zephiran Chloride 1:1,000. (Use one or more for diluents of antibiotics in amounts that will not exceed 1.5 c.c. to aerosolize per treatment.) DO NOT USE DISTILLED WATER.

Materials for the patient's room or home:

1. Sputum and vital capacity graph at bedside for the use of the patient in charting 24-hour sputum volume and average vital capacity daily. The sides of the sputum jar are covered with paper.
2. Oxygen tank with gauge, hand or foot pump or hand bulb
3. Nebulizer with rubber tubing and glass Y-tube
4. Neosynephrine (0.25–1 per cent), 15 c.c. bottle with dropper top
5. Vaponefrin, Isuprel or epinephrine HCL (1:100), 15 c.c. bottle and glass dropper.
6. Normal saline, 120 c.c. bottle with dropper top
7. Mouth wash (Cepacol)

Technic:

To deliver the prescribed dose to the affected lung area requires painstaking attention to detail, and the physician must be able to demonstrate the technic well himself in order to teach and check on his patient's technic. The value of aerosol therapy depends on the ready recognition of defective technic, equipment and materials.

Stress these features:

1. He directs the nebulizer toward his wide open mouth but does not place it closer than the level of his lips. (He must not place his lips or teeth around the nebulizer.)

2. The bronchodilator and vasoconstrictor are aerosolized together in the first part of the treatment. This will open the bronchi wide, loosen the mucous plugs and secretions, and thereby encourage coughing.

3. The Vaponefrin may be expected to color the secretions pink, and he should be forewarned that this is not blood.

4. He should carefully time each inhalation so that it coincides with the nebulized blast of the drug. He then holds his breath momentarily and exhales. Upon finishing the first part of the aerosolization he continues to cough up what he can, and it may be advantageous to use postural drainage.

5. He then places the specific antibiotic solutions in the nebulizer and proceeds to inhale them in the same fashion.

6. If he is not too tired, a few additional drops of saline placed in the nebulizer can then be aerosolized, thereby reducing the waste of the residue left behind.

7. He refrains from coughing and moving about for 1 hour.

8. He rinses his mouth and teeth out carefully with a flavored mouth wash (Cepacol).

9. He washes out nebulizer with tap water, nebulizing as he does so, and hangs it up to dry. (This maneuver cleans the delicate capillary tubes.)

10. Repeated demonstrations by the patient for the doctor on subsequent days will disclose any errors in technic.

For children or adults who cannot grasp technic:

There are certain tents and masks available for this problem, but dilution factors, the great loss of the antibiotic, the inadequate direction of the nebulized blasts, and the uncomfortable warmth make most of them impractical. Rebreathing apparati have proved to be unnecessary. Small hoods with built-in nebulizers, or simple cellophane or pliofilm face hoods with a nebulizer and an L-tube penetrating the front can be easily fashioned to fit any size head.

For physicians' offices:

Oxygen tanks or electric motor compressors with attached nebulization outfits are practicable for demonstration purposes, or for the treatment of acute sinusitis, but aerosol therapy for bronchial and pulmonary disease should be given at least 3 or 4 times daily for several days or more, and therefore should not be given infrequently and irregularly in the doctor's office.

Results and Duration of Treatment

Within 24 to 48 hours the sputum becomes thinner and easier to raise, loses its odor and decreases in volume. The cough decreases and requires less effort. The fatigue is thereby reduced, and the sleep is less interrupted. The dyspnea is relieved, and the vital capacity is increased.

Weight gain, better appetite, and increased work tolerance may all be noted in varying lengths of time, from 2 days to 6 weeks. One must refrain from discontinuing treatment too soon. The duration of treatment is extremely variable and depends upon the nature and extent of the disease, but 5 days is perhaps the minimum in most cases of chronic lung disease. It is important that sufficient dosage be used to avoid drug-fastness or other undesirable biologic effects.

If penicillin is used alone, within 48 hours only gram-negative organisms, usually of the colon-aerogenes group, may remain. It is recommended, therefore, that streptomycin be used simultaneously from the beginning, or certainly begun at this point. Since it has been shown that an organism is far less likely to develop a resistance to 2 antibiotics used simultaneously than consecutively, it is usually better to use both penicillin and streptomycin together whenever practicable.

Side Reactions

The only troublesome reaction, as well as the most frequent, has been a sore, smooth, blackened, or reddened tongue. The nature of this reaction is not well understood but apparently responds to the use of nicotinamide and riboflavin. Whether aerosolization uncovers a subclinical vitamin deficiency, whether impurities in the penicillin cause it, or whether the harmless commensals in the mouth that are responsible for the protective coating are destroyed is still an open question. One may cover the tongue with a piece of cellophane or pliofilm, or mold a tongue cover from wax to avoid this reaction. Rinsing out of the mouth further decreases this development.

Irritative cough, bronchospasm and substernal soreness occasionally develop and are indications for temporary withdrawal of the drug. These reactions are very infrequently encountered.

THE USE AND ABUSE OF SOME NEW DRUGS*

ELOISE W. KAILIN, M.D.

Washington

JOHN C. SULLIVAN, M.D.

Clinical Assistant Professor of Medicine, Georgetown University School of Medicine

ALLERGY

DR. KAILIN:

Q. *Which is the best antihistamine for general use?*

A. There are some 18 or 20 chemically different antihistamines. There is no one antihistamine which is outstanding. Any given antihistamine may work well in one case and be ineffective or produce side effects in another. If one does not work well be sure to try others before concluding that "antihistamines do not work." It is generally agreed that benadryl produces a higher proportion of sedative side effects than the other drugs and that Neohetramine and Antistine are less potent than the rest.

Q. *How useful are antihistamines applied locally to the skin or nasal mucosa?*

A. The antihistamines are effective local anesthetics and also are chemical irritants. In nasal application the results depend on which effect predominates. Sometimes they are helpful, at least temporarily, and sometimes they aggravate symptoms either immediately following application or a few hours later. As to application on the skin, the local anesthetic effect allays itching and the irritant effect is analogous to that of tars. In acute dermatitis the effect may be one of aggravating the lesion. In chronic dermatitis good results often ensue. There is one serious drawback to their use locally on skin lesions; they are sensitizers and induce contact-type dermatitis. Furthermore, contact-type dermatitis is more readily induced when the sensitizer is applied to discontinuous, abraded, or actively allergic epithelium. And the use of antihistamines locally becomes still less attractive when one realizes the time lag involved in diagnosing sensitivity to a medicament applied to a chronic dermatitis.

Q. *Are the antihistamines useful in gastrointestinal allergy?*

A. In answering this question it must be borne in mind that the antihistamines have significant atropine-like activity. Gastrointestinal conditions which are responsive to atropine thus may be benefited by the administration of antihistamines on another basis than their antihistaminic activity, and it is faulty to conclude that a given gastrointestinal condition is allergic because it responds to antihistamines. On the other hand, allergic edema in the gastrointestinal mucosa is not always prevented by the administration of antihistamines, which do not counteract 100 per cent of any kind of allergic reaction. So one cannot conclude that a given gastrointestinal complaint is not allergic because of failure to respond to antihistamines. Many cases of gastrointestinal allergy are helped by antihistamines, but the response to these drugs is not a valid therapeutic test for allergy.

Q. *Are antihistamines useful in the treatment of bronchial asthma?*

A. Antihistamines are appreciably less effective in bronchial asthma than in hay fever or urticaria. The figures usually quoted are that only 1 in 5 asthmatics finds symptomatic relief from these drugs. The atropine effect of the antihistaminics is undesirable, because mucous gland secretion is diminished. One of the basic therapeutic aims in the management of bronchial asthma is to keep bronchial mucus from forming thick, tenacious plugs in the bronchial tree. An additional undesirable pharmacologic action of the antihistamines is constriction of bronchial musculature. Histamine-induced contraction is counteracted, but the independent activity of the antihistamine tested was to constrict bronchioles. From a practical standpoint there is no objection to the use of antihistamines in mild, sporadic asthma attacks when the drug is effective. However, in more serious attacks or those likely to be prolonged beyond a day or 2, antihistamines are contraindicated.

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* These questions and answers were part of a panel discussion on this subject, with Dr. Wallace M. Yater as Moderator, presented at the Midwinter Seminar of the Medical Society of the District of Columbia, February 21, 1952. A similar article by other panel participants appeared in the August issue of the MEDICAL ANNALS.

GASTROENTEROLOGY

DR. SULLIVAN:

Q. *What is the role of gastric antacid therapy in uncomplicated ulcer management?*

A. In combination with the other factors in the management of uncomplicated peptic ulcer, gastric antacids help to accomplish neutralization of the gastric contents either by simple chemical reaction or by physically absorbing hydrochloric acid. The two main classes of antacids are the soluble and the insoluble. Their greatest usefulness is in the acute or recurrent gastroduodenal ulcer, administered as frequently as every hour or 2 and especially at night at 2- or 3-hour intervals.

Q. *Is antacid therapy necessary or desirable in the remission phase of ulcer? Does administration of antacid (either soluble or insoluble) prevent recurrence of ulcer?*

A. Once the ulcer has been demonstrated to be healed, the continued use of antacids of any type for any length of time is probably not warranted in view of the fact that we have no good evidence that the continued use of the antacids in the remission phase prevents or even helps to prevent a recurrence. Nor is there good evidence that the continued use of antacids during the remission phase of ulcer reduces the gastric acidity.

Q. *Is there a place for the soluble antacids in the management of uncomplicated ulcer?*

A. Soluble antacids have been used for many years in the past in the management of uncomplicated ulcer. Although neutralization of gastric acidity is ordinarily quite rapid and produces rather rapid relief of ulcer-type pain, its action is usually not very prolonged. It was also found that moderate doses of the soluble antacids produced a so-called "rebound" or delayed rise in gastric acidity and produced changes in the electrolyte balance of the blood, threatening alkalosis at times with uncontrolled administration of the drugs. Prolonged use of these soluble antacids in occasional cases may cause a syndrome of pseudohypoparathyroidism. Occasionally, also, urinary tract stones may form in some individuals who have impaired renal function and, especially if alkalosis is produced, by prolonged repeated consumption of the soluble antacids. In spite of these, there are still some who favor the employment of soluble antacids in the management of acute gastroduodenal ulcer or of recurrent gastroduodenal ulcer, along with, of course, other measures.

Q. *Which are the most efficacious of the group of soluble antacids in ulcer therapy?*

A. Probably the most efficacious of the soluble antacid group of drugs is precipitated calcium carbonate, because it does not, for the most part, cause alkalosis even when used rather constantly. There is also very little of the rebound rise in gastric acidity following its use in ordinary dosage. The therapeutic dose is in the range of 1 to 2 grams, administered as often as every hour on the hour, or every 2 hours.

Q. *How is the undesirable feature (constipation) of most of the insoluble (aluminum hydroxide) preparations managed?*

A. All who have used the aluminum hydroxide preparations as antacids in the management of ulcer have experienced the disadvantages which these preparations have, especially constipation, and often fecal impactions which are difficult to correct. It appears that the best solution to this problem is as follows:

1. Instruct the patient that the aluminum hydroxide preparation may produce constipation.
2. Instruct the patient to take hot, dilute fruit juice (orange preferred) 3 or 4 times during the day, mixing 2 or 3 ounces of the juice with 2 or 3 ounces of hot water.
3. Instill warm, heavy oil (mineral or vegetable) into the rectum every second or third night, retain overnight, and expel in the morning.
4. If the patient is hospitalized, rectal examination at least twice weekly, especially during the first week of therapy, should be a must. The indiscriminate use of prescribing a laxative in patients who have a fecal impaction should be discouraged, because a laxative will not accomplish what a rectal examination and instillation of oil can do.
5. The use of aluminum hydroxide preparations to which are added magnesium compounds are often helpful in overcoming the tendency toward constipation.
6. The patient should be instructed to contact his physician if there has been no bowel movement in 2 or 3 days during the active treatment of the ulcer.

Q. *When should insoluble (aluminum hydroxide) preparations be withheld in the management of peptic ulcer?*

A. It is probably best to withhold the administration of the aluminum hydroxide preparations during the period of an active bleeding ulcer, since it has been observed that an occasional bleeding ulcer patient given aluminum hydroxide preparations has developed intestinal obstruction, the cause being a bolus consisting of blood and the aluminum hydroxide. Intestinal obstruction has been caused by an aluminum hydroxide mass alone.

Q. *How does the effectiveness of banthine on gastric secretion and gastrointestinal motility compare with that of atropine?*

A. Experimentally, both banthine and atropine almost completely inhibited the secretion of hydrochloric acid in gastric pouches that were vagally innervated and vagally denervated. Clinically, following the oral administration of 100 mg. of banthine there was definite retardation in the gastrointestinal transit time of the barium meal followed by fluoroscopic control in several patients studied by different observers. Atropine sulfate in doses of $^{1}/_{50}$ to $^{1}/_{75}$ of a grain also produced reduction in gastrointestinal motility. It appears that the inhibitory action of banthine on the gastrointestinal motor activities is more constant and more predictable than its depressant action on gastric secretion. The degree and duration of gastric secretion inhibition varies with the dose and the method of administration. After an oral dose of 100 mg. of banthine the inhibitory effects of gastric secretion may persist as long as 6 to 8 hours. The gastrointestinal motor inhibition produced by banthine in man seems to be longer lasting and more pronounced than that produced by atropine, particularly after each had been given orally.

Q. *What are the most common undesirable side effects of banthine? How are they controlled?*

A. The most common undesirable side effects of banthine are very similar to those of atropine. Blurring of vision and dryness of the mouth are quite frequent, but these undesirable symptoms appear to diminish or even to disappear as the drug is continued. Another fairly common side effect of banthine is in those patients with enlarged prostate. They will encounter difficulty in emptying the bladder. Some emotionally unstable patients may exhibit some peculiar behavior manifestations, thereby suggesting stimulation of the central nervous system by banthine. Approximately 10 per cent of the patients who take banthine are unable to continue it because of the undesirable reactions described above. Approximately 30 per cent of all patients receiving banthine note some one or combination of the side reactions, such as blurred vision, difficulty in emptying the bladder, dryness of the mouth, nausea, constipation or tachycardia.

Q. *Does banthine prevent recurrence of ulcer? Does banthine prevent occurrence of complications?*

A. Banthine cannot be categorically said to prevent recurrence of ulcer. Since it cannot be considered a cure for ulcer, it cannot, therefore, prevent recurrence. Nor does banthine prevent recurrence of complications as has been claimed. Banthine does not always relieve the intractability requiring surgical treatment in patients with the chronic recurrent variety of duodenal ulcer.

Q. *Should banthine alone be employed in the ambulatory or hospital management of ulcer?*

A. It is difficult to furnish a cut and dried answer to this question. The use of banthine alone in the patient who has an acute or recurrent gastroduodenal ulcer which is uncomplicated is probably worth while, inasmuch as many of the patients will obtain quite striking relief quickly following institution of banthine therapy. However, we must remember that the patient should be carefully followed in spite of the absence of pain, since we know that an ulcer is not healed simply because pain has disappeared. In the hospital management of ulcer, usually of the complicated variety, banthine should not be used in the obstructed ulcer because of its gastric motor inhibitory effect on the stomach.

Q. *Should banthine be used in combination with other drugs and/or other factors in the control of ulcer?*

A. There are many physicians who believe that banthine alone is sufficient to control peptic ulcer symptoms. There are others who believe that the combination of banthine with sedative, other antacids, diet and rest is necessary in the control and healing of an ulcer. They refer to the complicated ulcer particularly in the use of banthine combined with other measures. However, whatever type of therapy is used, it is of the utmost importance to aid patients with ulcer in understanding the very important part which emotional factor or factors play in this disease. Banthine and other drugs only supplement and indeed do not supplant the assisting of the patient in his adjustment to his emotional problems and difficulties as a major factor in the management of this condition.

Q. *Are other antispasmodic preparations of the atropine-like group more effective than atropine in producing a desirable effect in ulcer therapy?*

A. Other antispasmodic preparations on the market of the atropine-like group are no more effective than atropine or belladonna in producing desirable effects in the management of ulcer. Pharmacologically we have no good evidence that these preparations are superior to atropine.

Q. *What is the status of the recently employed ganglionic and nerve impulse blocking agents such as Etamon (TEA) or C_6 (Hexamethonium) in the management of uncomplicated ulcer?*

A. Tetraethylammonium chloride and bromide both are substances which inhibit gastric function, but their action is too short-lived and their side effects on blood pressure are too unpleasant for them to be employed as useful therapeutic agents in peptic ulcer. Hexamethonium (iodide, bromide, chloride) or C_6 depresses gastric motility and secretion; 100 mg. given subcutaneously may produce achlorhydria for a 3-hour period and reduction in gastric motility. However, side effects, especially on blood pressure, also tend to render it less useful as a practical agent in the management of uncomplicated ulcer at this time.

Q. *What is the status of anion exchange resins in peptic ulcer therapy?*

A. Various synthetic resins (anion exchange resins) have been used as neutralizing agents and have been found to relieve pain and inactivate the pepsin of gastric juice, when given in adequate dosage (1 gram). They do not seem to offer any great advantage over other antacids.

Q. *Comment on the desirability of the use of protein hydrolysates, alkyl sulfates and carboxymethylcellulose in the management of ulcer.*

A. Protein hydrolysates have been employed in recent years as antacids but as yet have not shown any great advantage over plain milk feedings in relief of ulcer distress. Their action in reducing gastric acidity is variable, but their clinical value does not run parallel with this. Alkyl sulfates or detergents are substances which primarily inactivate pepsin without significantly affecting gastric acidity. They are surface-acting agents capable of denaturing proteins. Their in vivo effects in man have not been significant, since ingestion of sodium lauryl sulfate and sodium alkyl sulfate results in little or no decrease in pepsis activity. Therapeutic results, hence, have been disappointing. Side effects of epigastric burning sensation, nausea and diarrhea render the preparation intolerable by most patients. Carboxy-methylcellulose, a salt of a weak organic acid and a strong base, is a viscous material formed when it goes into solution, first passing through a gel stage during which sodium ions are exchanged for hydrogen ions. The resulting solution is a true buffer. Acid rebound and alkalinization do not occur, and acid-base balance is unchanged. It is nonabsorbable and hydrophilic, and thus also acts as a bulk type of laxative. No signs of toxicity have appeared. It can be taken in solution or tablet form. The tablets are dispensed as Carmethose. Clinical results in ulcer patients with this preparation seem favorable but are not especially outstanding over other methods or other tried and proven preparations.

Q. *Have gastrointestinal extracts (Viodenum) been of value in ulcer therapy?*

A. Preparations such as powdered duodenal mucosa, and extracts from the stomach and also the small intestine, marketed as Viodenum and Robuden, have been given to patients with ulcer. There is no proof that these substances contain an anti-ulcer factor similar to or identical with that which seems to be present in enterogastrone. The methods of preparation of gastrointestinal extracts and the material from which these extracts are made differ from the enterogastrone preparations used in experimental work. There have been no consistently good results reported in the literature with the use of these gastrointestinal extracts. Further work must be done in connection with the improvement of the method of manufacture of these agents together with studying methods of administration before evaluation is completed.

Q. *How long should sedatives be employed in the management of an acute or recurrent peptic ulcer?*

A. Sedatives are very helpful in the management of the patient with an acute or recurrent active peptic ulcer. They effect a depressing action on the cortex and the subcortical centers and also upon the brain stem nuclei and induce generalized relaxation. Two good, well known preparations are phenobarbital, either in the tablet, powder or liquid form, and sodium amytal. It has been shown by some studies that the sodium salt of phenobarbital seems to have less effect on the gastric secretion of man in a dose of 1 to 3 grains than does plain phenobarbital, which seems to have a stimulating effect on gastric secretion. Sodium amytal used in a dose of 1 to 3 grains every 4 to 6 hours is an effective sedative preparation. Some physicians prefer to use a liquid form of phenobarbital or sodium phenobarbital in doses of 1/4 to 1/2 grain every 4 to 6 hours around the clock, especially during the first few days of the management of an acute or recurrent ulcer. Usually sedatives given at 4-hour intervals are not required for longer than 10 to 14 days during an acute episode. However, a small dose of a sedative on arising, at noon and in the evening is often helpful in reducing the tension of ulcer patients, to be given for several months after the manifestations of ulcer disappear, and at any time the administration of a sedative seems indicated.

THE ELECTROCARDIOGRAPHIC MANIFESTATIONS OF CORONARY ARTERY HEART DISEASE

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ABNORMALITIES of the electrocardiogram are not per se diagnostic of coronary artery disease. Interpretation of the form of the ventricular complex must be made in the light of the entire clinical picture. On the other hand, some patients with severe coronary artery disease exhibit electrocardiograms which are well within the limits of normal. There has been a tendency on the part of some physicians to interpret minor deviations and conduction defects as indicating coronary disease. In an asymptomatic individual without other supporting evidence such a conclusion is not justified.

Angina Pectoris, Exertional Type. The resting electrocardiogram may be within normal limits. Nonspecific changes such as T wave inversions in Leads I and/or II and in the leads from the left side of the precordium are not uncommon. Sometimes there is inversion of the T wave in Lead I only with or without flattening of this deflection in Leads V_5 and V_6. A flat or inverted T wave in Lead II is probably abnormal in patients with angina pectoris. Since a large number of these patients have long-standing essential hypertension, the findings due to left ventricular hypertrophy are not uncommonly seen. Incomplete or complete right or left bundle branch block or other defects of intraventricular conduction are sometimes found. QRS alterations with or without T wave changes suggesting old myocardial infarction may be found (see *Myocardial Infarction*).

During an attack T wave changes with or without deviation of the RS-T segment from the isoelectric level are often observed. Probably the commonest change is downward displacement of the RS-T segments in Leads I and/or II and in all of the precordial leads or in the leads from the right or the left side of the precordium. In other instances the T waves become inverted in the leads mentioned. Rarely there is upward displacement of the RS-T segments in these leads. Downward RS-T displacement or T wave inversion or rarely upward RS-T displacement sometimes appears in Leads II and/or III and V_F. A record of a spontaneous attack of exertional angina pectoris is rarely obtained.

In patients with a typical history and who are 50 years of age or older, it is fair to ascribe nonspecific electrocardiographic changes to coronary arteriosclerosis. A normal electrocardiogram or the absence of other abnormal findings does not rule out the condition.

When the electrocardiogram is within the limits of normal it is sometimes necessary to try to induce an attack and to record the electrocardiographic changes if they occur. This is done by having the patient perform an amount of exertion which ordinarily precipitates pain. In the physician's office the patient has a certain sense of security, and hence the emotional factor is often absent. As a result he may be able to perform many times the amount of exercise without experiencing the symptom of pain. Because of the risk of causing myocardial infarction or sudden death, exercise tests should be limited to the following:

1. All persons under 40 years of age because of the obvious implications of the diagnosis.

2. In patients 40 through 49 years of age the subject may elect to have the procedure performed after an explanation has been given.

3. Age is not a factor when the resting electrocardiogram is normal and the individual is in a "key position," i.e., when there is a question of military service or benefits, application for

insurance or a question of insurance benefits, or litigation of various sorts is involved. The test may be extremely important in the case of patients with atypical symptoms.

A positive test consists of any of the changes described in the second paragraph of this heading. When pain is present, minor deviations from the normal become more significant. A negative test (absence of electrocardiographic changes during an induced attack) does not exclude the presence of coronary arteriosclerosis.

Angina Pectoris at Rest (*Angina Decubitus*). Between attacks the electrocardiogram may be normal or may show any of the nonspecific changes described under exertional angina pectoris. During an episode of pain alterations similar to those recorded after exercise in patients with exertional angina may appear. Sometimes the electrocardiogram remains normal or does not deviate from that recorded when the patient is free of symptoms. In a few individuals one may be able to demonstrate that an ectopic rhythm such as paroxysmal auricular or ventricular tachycardia or auricular flutter or fibrillation is responsible for inducing the episodes.

Myocardial Infarction. When there are typical alterations in the form of the ventricular complex, the diagnosis of fresh and recent infarction can be made by serial electrocardiograms alone. Fresh infarction, i.e., one a few hours to a few days old, is characterized by upward displacement of the RS-T segments. In recent infarction, i.e., one day, weeks or even months old, abnormal Q wave or QS deflections appear, the RS-T segments return to the isoelectric level but display an upward convexity, and the T waves become deeply and symmetrically inverted. In old infarction, i.e., months or years old, the QRS changes persist but the T waves gradually return to the upright position. In the earliest stage of fresh infarct without QRS changes, the differentiation from pericarditis is made by observation of the clinical course and subsequent tracings. These electrocardiographic characteristics must be correlated with the clinical history in order to establish the exact time that the infarct occurred. For example, the electrocardiographic findings of recent infarction may persist for years.

Abnormal Q waves or QS deflections without T wave changes nearly always indicate that an infarct occurred months or years before. The history nearly always discloses the exact time. Abnormalities of the kind in question have occasionally been recorded in patients without any symptoms or signs of heart disease. In these it is extremely unlikely that infarction has occurred.

The location and extensiveness of myocardial infarction are best shown by the electrocardiogram. The larger the infarct, the greater the number of leads that will exhibit QRS abnormalities. Depending upon the lead showing abnormal Q waves or QS deflections infarcts may be classified as follows:

Anteroseptal—Leads V_1 through V_3 or V_4.

Anterolateral—Leads V_4 through V_6.

Midanterior—leads from the midprecordium.

High anterolateral—QS or abnormal Q waves (0.04 second or more) and upwardly convex RS-T segments and inverted T waves in Lead V_L. The standard precordial electrocardiogram may remain normal or exhibit inverted T waves in one or more leads. Occasionally there are questionable QRS changes, and in a few instances the standard precordial electrocardiogram is entirely normal. In such cases leads from higher levels on the anterolateral chest wall, made higher by one, two and three interspaces respectively in the lines of the standard precordial leads, disclose the diagnosis.

Myocardial infarction with T wave changes only occurs. When the anterior wall is involved there are upwardly convex, isoelectric RS-T segments and deeply inverted, symmetrical T waves in all or nearly all of the leads comprising the precordial electrocardiogram. In posterior infarction of this kind, RS-T segmental alterations and T wave inversions are seen in Leads II, III, and V_F. In either case, the T waves gradually become upright within several months.

Posterior infarction shows these changes in Leads V_F and III and/or II. A Q wave of 0.04

second or more in Lead V_F strongly suggests posterior infarction.

Posterolateral infarction shows these changes in Leads V_F, III and/or II and the leads from the left side of the precordium.

Posteroinferior infarction gives the same changes as plain posterior infarction, but in addition Lead V_E also exhibits diagnostic changes.

High posterolateral infarction shows the diagnostic changes in Lead V_L. All leads from the anterolateral chest wall, including those from higher levels, remain normal. Leads from the left posterior chest wall display progressive changes in serial tracings.

Myocardial infarction may be complicated by right bundle branch block. The QRS, RS-T and T wave changes of both anterior and posterior infarction are not concealed, but they may be slightly modified.

In cases of myocardial infarction complicated by left bundle branch block the changes in the ventricular complex are nearly always concealed. When the QRS complexes are small, characteristic RS-T segmental displacement and T wave inversions may be found in a series of tracings. If the infarct involves the interventricular septum, abnormal Q or QS deflections may appear.

In cases of myocardial infarction complicated by local intraventricular block, there are the signs of infarction, usually posterior, the QRS interval is more than 0.10 second, and neither right nor left bundle branch block is present.

Transient QRS changes or transient bundle branch block may occur.

Persistent displacement of the RS-T segments presenting signs similar to those of fresh infarction after months or years usually indicates that ventricular aneurysm is present.

Reciprocal (or confirmatory) QRS, RS-T and T wave changes of both anterior and posterior infarction have been omitted from this discussion in order to make it less complex.

Subendocardial infarction is indicated by downward RS-T displacement and sometimes abnormal Q waves in several or all of the precordial leads. In days or weeks the RS-T segments return to the isoelectric level and the T waves become inverted. Posterior infarction must be excluded. It is rare that such findings are present in Leads V_F, III, and/or II.

Myocardial infarction sometimes occurs without any electrocardiographic manifestations. If the patient has all of the typical symptoms and the physical findings of this condition, it is very rare that the electrocardiogram does not show some change. In such cases proper treatment should be instituted. It is fair to assume that the infarct is not a large one provided frequent tracings fail to display any deviation from the control.

Silent myocardial infarction is one which occurs without the complaint of pain. Serial electrocardiograms exhibit the characteristic QRS and T wave changes as described above. This is extremely rare and occurs in the older age group.

In some cases of known infarction both QRS and T wave changes regress so that after several months or years the electrocardiogram is well within normal limits. More often there are some residual changes.

Multiple infarcts occur in almost any conceivable combination. The electrocardiograms of these are often quite complex.

MARITAL CONFLICT AND FUNCTIONAL ILLNESS

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CONFLICT between husband and wife can be sufficiently intense to produce manifestations of a functional illness. The tendency of a patient is to hide his family problems. Often much time and money are wasted before the patient reveals the true basis for an emotional disturbance. Misinterpretation of attitudes is a common type of marital difficulty. The immature wife of a neurotic, withdrawn man may feel unwanted, unloved. In need of support herself, she will be unable to see that her distant husband is emotionally sick. Failing to get sufficient attention, she will grow increasingly resentful of her partner, or develop a sense of severe insecurity.

This exaggeration of her sense of unworthiness may produce a functional illness. The reassurance of a thorough examination, although necessary, will not influence the clinical course of this patient. Unless she is reoriented a severe neurosis may develop or a divorce eventuate. If she is openly hostile to her husband he may develop mental illness.

Reorientation begins when the patient feels that her doctor sincerely wants to help her. Thereafter she will be able to engage in frank discussions of the problem. The next step of convincing her that her husband is emotionally unbalanced can then be taken. The patient must be helped to understand that her husband's self-concern and self-dissatisfaction are so great that he has no strength to take interest in her needs. With the realization that her husband cannot take interest apart from his own personal problems, the patient may be able to replace her resentment with more constructive attitudes.

Mrs. K. W. presented such a problem. Her chief complaint was fatigue. This was associated with cough, pain in the right chest, weight loss, anorexia and insomnia. She had been sick for 8 weeks and was feeling worse. No clinical or laboratory evidence of organic disease could be found. After several interviews she admitted that she was depressed because her marriage was an unhappy one. With tears in her eyes she told me: "Since I married Ted we have been out only 3 times in 18 months. When we are at home he reads all the time. He rarely shows me any affection and never tells me that he loves me. I try to please him with good meals and a nice clean house and by being thrifty and attentive. I try to show him affection, but he never responds. I feel he couldn't act like this if he really loved me. I just don't know what to do."

Mrs. W. had no insight into the problem which Ted presented both to her and to himself. In his attitude she could see only rejection, and because of this misinterpretation she had developed a functional illness. She slowly came to accept the fact that Ted's neurosis, rather than her lack of personal worth, prevented him from being a good companion and lover.

She also found that emotional problems existed within herself. Life with Ted was to have been a continuation of the treatment she experienced in her own family circle. Her sole source of emotional strength had been submission to parents and siblings. She did menial work for the family, such as washing, cooking, baby-sitting and cleaning. The gratitude and approval she gained gave her a sense of importance. Finding that her husband did not respond to these efforts was so demoralizing that she lost her self-confidence and went into a neurotic illness. For the first time in her life she felt worthless.

Explanations of the dynamics of Ted's withdrawn personality freed the patient from self-deprecatory ideas and helped her to give up nonconstructive attitudes toward Ted. She told me on one occasion: "I have stopped blaming myself for not doing enough or being good enough to make Ted like me. I had been going out alone, but lately Ted has gone with me. A few days ago he took me to a picnic and seemed quite proud of me. I have been doing my best to understand him and help him find himself."

A year later she reported that Ted still had very little to say but was doing many things which make her feel loved. "He loves to play with our daughter now. He never took any interest in her because he wanted a boy. Our sex life is better than ever. He takes me wherever he goes, even to poker games."

Mrs. N. L. consulted me because she wanted bigger breasts. She is an attractive, well-built woman with average-sized breasts. She had nursed her infant for 6 months. In spite of the facts she wanted some sort of treatment. On one occasion she told me that her husband had ridiculed her small breasts. Along with this came the admission: "I am at the end of my rope. I am just about ready to ask for a divorce. I feel depressed and irritable and have lost all perspective." She went on to tell of her great disappointment in the man she had married. "My husband is not the same man I knew before marriage. He has no patience with me and won't listen to the problems and worries I have. If I get angry with him, he sulks and won't talk to me for a week. I thought he was a tower of strength, that he was calm, patient, and never became upset or worried. I find now that he is just the opposite, is easily upset over minor things. Before we were married he was kind, considerate and understanding. Now he ignores me, or tells me that I am stupid and makes fun of my pronunciation."

Mrs. L. soon realized that she resented her husband's failure to give her the comfort she had anticipated. She recognized that her motive for marriage had been a great need for kindness, affection and understanding. She quickly appreciated that this egocentric attitude defeated its purpose and that in order to make gains she would first have to give exactly what she needed.

Understanding herself paved the way for her to adopt a more liberal attitude toward her husband. She saw that his distant and critical attitude symbolized his resentment for her failure to give him comfort and understanding. Soon thereafter the realization struck her that Mr. L. had little self-confidence. The fact that he ridiculed her breasts had made her feel rejected. Now she could see that he needed to be proud of her appearance to raise his low self-esteem.

The attainment of this insight enabled her to resolve some of her reactive anger and she reported: "I haven't disliked him as I did nor have I started arguments. Whenever he sulks or is critical I realize why and don't let myself get upset. My marriage is running much more smoothly and I can see how George appreciates my interest in him."

Mrs. S. S. complained of feeling nervous and irritable. For the last 4 years she had slept poorly, cried easily, and had nocturia 3 or 4 times a night. After a physical survey and reassurance she admitted that her main problem was her husband. "Sam is so lackadaisical that he drives me to tears," she said. "He won't make decisions unless I force him to do so. He is satisfied to let me run things. He likes to stay home and goes out only when I insist. At home he talks very little and never compliments me or shows affection. I get very angry, yell at him and abuse him, but he never flares back at me. I am sure I hurt him with my moods because he will often develop a sick headache after such sessions. I hate myself for upsetting him but I want him to wake up, be more forceful, take the part of the leader, and take more notice of me. What can I do?"

Mrs. S. S. soon accepted the fact that her husband's attitude toward life is symptomatic of an emotional illness. She agreed to give him the tolerance, kindness and encouragement which might help him to change. Insight into her own resentment, based on inner needs, also developed. She found that she felt insecure of herself and needed the reassurance of a strong, affectionate man. She then sharply realized that all her efforts had been bent on changing her husband, not on accepting and loving him. A year later she reported: "Sam's headaches are better and I feel happier."

Needless to say, there will be failures in dealing with this problem. Mrs. L. S. came under my care for a bleeding peptic ulcer. She had been married for 5 years to a chronic alcoholic. He had been a good provider but each evening would drink himself into a stupor. They had no friends and rarely went out. She wanted her husband to change, to stop drinking, and to be a good companion. He refused treatment, saying that his wife, not he, needed a psychiatrist. Mrs. S. was unable to face the fact that he would never change. Consultation with a psychiatrist was advised and refused. So great was her need for comfort and dependency that she could not give up what little solace she had and attempt to establish a new life for herself.

It is well to begin therapy by giving the patient instructions about the basic dynamics of a neurosis. A normal person can be aggressive as the need arises, submissive when the interests of the group are served best, and withdrawn when meditation is desired. This ability to vary emotional response is based on self-confidence. Self-confidence arises out of an essentially loving attitude of a parent for a child. The person who has a minimum of anxiety, i.e., self-concern, felt in childhood that his parents were essentially pleased with him. Because of the ego-strength arising out of this relationship such an adult will be able to use the three modes of social adjustment and meet reality demands.

The neurotic person is able to use only one of these mechanisms and must suppress the other two. If his parents were hypercritical or demanding, he reacted with submission to please them and gain the security of their approval. If they were withdrawn and introverted he became aggressive in order to gain the comfort of even angry attention. If the environment of childhood is too exacting or hostile, a child may withdraw into the pleasurable activity of thumb-sucking, masturbation or phantasy.

These reaction patterns usually continue into adult life. The introverted husbands of this article are very likely the end result of the last example of childhood trauma described above. They are devoid of self-confidence and live on the edge of life as a spectator. They are unable to expand into life interests because of an unconscious fear of environmental threat. Never having experienced sufficient acceptance, they feel essentially unworthy, inferior. Ever fearful of meeting with hostility, rebuff or disapproval they dare not venture from the safety and isolation of their ivory tower of withdrawal.

Once our patient has accepted this she may be able to adopt more constructive attitudes toward her husband. She may be able to help her partner gain self-confidence by being perhaps the first person who is affectionate, interested, unselfish and uncritical toward him. With sufficient inner strength he may eventually be able to appreciate the emotional needs of his wife.

Our patient, through understanding of her husband, may be able to appreciate the deeper significance of her own reactions. She will find that her own self-concern, feelings of inferiority, or exaggerated self-critical attitudes have compelled her to demand a lot of devotion and affection. She may realize that this great need for reassurance of personal worth acts as a barrier toward understanding her husband or anyone else. Because he fails to give her a better opinion of herself, she either projects her hostility inward and becomes depressed or grows openly and increasingly resentful toward him.

At this point the patient may be able to give up some of her own egocentricity and try to help her husband. Having accomplished transference of interest from self to another person, she will find this to be a healthy approach to life in general. With growth of interest apart from self, our patient's emotional needs will lessen proportionately. If this cannot be accomplished,

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RESOLUTION OF A PARANOID PSYCHOSIS*

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Associate Professor of Clinical Psychiatry, Georgetown University School of Medicine

The paranoid psychoses and the paranoid development in the life of a neurotic are at best extremely difficult to deal with. The difficulty is often compounded by inept mishandling in the very early stages of their development. In this paper I want to deal with this particular problem and its therapeutic implications in the later phases of treatment.

I have noted that the days and weeks immediately following the intense panic which reformulates the personality into what we call a paranoid mechanism is of paramount importance. This was demonstrated most vividly last month after a brief but meaningful contact with an acute paranoid episode. The contact of the physician, the family, and finally the psychiatrist may leave either permanent destructive scars or may lay the groundwork for early resolution of the acute psychotic stage to what we might call social recovery. Let us for a moment consider what might be going on in a patient at the very onset of his psychosis. After months or years of turmoil, conflict, and uncertain uneasiness in his dealings with people, some particularly significant, or insignificant but meaningful event shatters his previous tenuous, threadlike unity, and a most revolutionary and drastic reformulation becomes necessary. Sullivan has said that at the time of panic the patient is "in terror and the whole world threatening. Everyone is dangerous, hostile and bent on one's destruction. There is no trace of coöperative, much less collaborative attitude. The terror-stricken person is alone among deadly menaces, more or less blindly fighting for his survival against dreadful odds. The patient is engaged in magic operation in an attempt to protect himself, to regain some measure of security in the face of mighty threats, portents and performances in a world that has become wholly irrational and incomprehensible."

With this reformulation the patient feels the problem is understood and solved and the final, certain awareness has been reached. There is clarity where before there was confusion. All the doubts and uncertainties have now been resolved. All the strange, bizarre happenings, especially in the few chaotic days before the actual onset, now begin to fit into a general picture and finally make some sense. What has really happened? The shattering of the patient's ego or his capacity to integrate and discriminate in his relations with people has finally been abandoned on the basis of consensual validity. Now his self and his relation to the world rest almost exclusively on the basis of awareness and perception distorted by the prevailing delusion which has solved his search for security and unity. Whatever delusions are present, they involve a suspicious, cautious, cynical, and "on guard" attitude. Everyone, including those nearest and dearest to the patient, is put under this new scrutiny, and final judgment on them awaits some overt manifestation of their collusion in the state of affairs that has suddenly become clear to the patient. Thus we find in the initial phases that everyone is suspect; everything that happens or is being done is examined cautiously by the patient. Some actions on the part of the environment are particularly disturbing since they confirm the psychotic's delusion. In others, the routine activities are held less suspect. However, all is not yet settled. At this early stage the patient is still searching. The reformulation is only tentative and uncertain. There is an anxious, restless search for some evidence which can either confirm or deny his new view of the world and the humans in it. He is unstable, so to speak, in his new adjustment, and future events will determine whether he stabilizes on a paranoid formulation or returns to the previous prepsychotic state of searching for some solution, leaving room for a less disastrous defense mechanism to deal with his difficulties in living.

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* Read before the Section on Neurology and Psychiatry of the Medical Society of the District of Columbia, April 3, 1952.

It must be clear to any observer that the patient interprets and responds to all events in the light of the delusion and not according to previous personality characteristics.

With these thoughts in mind, let me present 2 brief case histories of patients who successfully resolved in a very short time an acute paranoid illness, which permitted them to stay out of the hospital and made it possible for them to resume their work and household duties and to secure psychotherapeutic assistance. In both cases the onset was sufficiently severe to merit immediate hospitalization, but with the effective coöperation of the husband in the one instance, and the wife in another, the patients were kept at home on trial, to see if it were possible to avoid hospitalization. It should be noted that both onsets were very acute, almost purely paranoid, and that the patients, although restless, destructive and dangerous, were controllable by means of drugs or repeated interviews.

Case 1. This case involved a 32-year-old man who became acutely agitated while under the scrutiny of a security agency. One evening, after several days of panicky fear of being watched, scrutinized, and followed, he heard messages from the drain pipe at the side of his house and made moves to murder his wife. She managed to quiet him down and contacted a psychiatrist, who saw him daily for a week. During that time he was overwhelmed with furious hostility toward his boss, fellow employees, and the Government. There were numerous delusions, all paranoid in nature. The patient was transferred to me at this time. His agitation was greatly reduced, but the paranoid suspicion and hostility were very prominent. It was decided to keep him out of the hospital for the present, since he appeared to be managing at home with his wife's coöperation.

For the next month the patient was seen frequently. Time was spent in hearing an endless series of complaints and grievances against everyone, particularly his wife and mother. He spent most of his days typing elaborate, detailed recitals of his mother's malevolent handling of him. These he would present and elaborate upon in the interviews. There was an unending stream of fiercely aggressive and hostile denouncements with occasional doubts about his reporting—wondering if he was not being unfair to mother. During this time no attempts were made to interpret any of the material. He was heard sympathetically and there was only questioning designed to further encourage the expression of his antagonistic feelings. He expressed some restrained gratitude to me for listening uncritically to his polemics, and near the end of the first 2 weeks the agitation diminished sufficiently for his wife to return to her work.

He remained at home alone, thinking, writing and devoting himself to some understanding of the crisis he had experienced. At the end of the month he was sufficiently quieted down so that our concern about the need for hospitalization was over. He expressed great fears about hospitalization throughout this period. I then began some intensive explorative therapy which has had the most gratifying results up to date. He began to question his delusions after about 3 months and gave them up shortly thereafter. The whole episode permitted an intensive study of the patient's underlying fears and expectations of destructive interest from his environment.

Case 2. The patient was a 26-year-old woman with 3 children, 1 a congenital hydrocephalic. One morning after several disturbing experiences at work she tried to jump out of the ground floor window of her home to escape attempted murder. She spoke of a "plot" which included her husband and an unknown group of men. She had hallucinations, was very agitated, and was forcibly restrained by her husband until the family doctor was called. Sedatives were prescribed but were not taken by the patient, and I was asked to see her. I arrived while she was serving breakfast to the family and was asked to sit down and have coffee. She regarded me with great suspicion and contempt, and answered my first few questions about how she felt with, "I feel fine; why shouldn't I?" The situation was explained by the husband, who encouraged her to tell me the details of what she had told him. I attempted a few more questions, and after finishing my coffee, I told her that she seemed too disturbed to talk to me then and that I would return later and hoped that she would talk to me at that time. Before I left the table the hydrocephalic child had knocked over the glass bowl of cereal, splintering it, and as the mother stooped to pick it up she eyed me cautiously and watched my every move. I explained the situation to the husband at the door, encouraging him to give the sedation to his wife, and left. Upon my return 8 hours later, she was still sullen, suspicious, and obviously antagonistic. She was in bed, and I told her that she must have been terribly frightened to react with such horror and panic, and that if she wished to tell me about it, I would be glad to listen. She said nothing except that she was "feeling fine" and not to bother her.

Her husband described her delusions and hallucinations to me. They consisted of a series of bizarre activities all centering around her suspicious concern of him and the house, the telephone, the wiring of the house, etc. I agreed to return the following day after encouraging her to take some sedation. The husband and I agreed to see what developed the next few days before we hospitalized her, hoping that it might not be necessary. On the succeeding days she talked somewhat more freely to me, mostly about who I was and what I wanted, and what I knew about the plot. During these talks I encouraged her to tell me about her concerns and reiterated my awareness of her disturbed and frightened state. I neither pushed for information nor did I do any routine history-taking. I merely sat with her, allowing her to communicate if she wished but left as soon as she indicated any displeasure about my presence. I always said I would return later on, hoping she could trust me enough to tell me what had happened to her. This continued for about a week.

A week later she described her episode in some detail and was prepared to examine some of the anxieties which preceded the episode. These anxieties centered around her hydrocephalic child, a recent visit to her family physician involving her loss of weight, and a new employee at her office who acted peculiarly. The next week I saw her only occasionally, and the agitation completely subsided, with her wondering what could have happened to her and how could she think such crazy things. She was moderately friendly, communicative, accepting me almost completely as an individual attempting to help her and anxious to discuss her child and the visit to her doctor. At our last contact we talked over the possibility of hospitalizing the child and in a superficial way discussed the possible explanations for her distortions and hallucinations based on the limited information she had supplied. It was also suggested that she seek psychotherapy to deal with the anxieties that precipitated such an outbreak. She returned to work the following week, and I have heard nothing more from her, except for a phone call when she told me things were going well at the office.

If one keeps in mind the intensely disturbing prepsychotic experiences, molded on a background of malevolent developmental experiences and the crisis situation with the reformulations necessary to prevent total disintegration, some elements in the technic of handling such patients become clear.

The period of time immediately following the psychotic reformulations are most crucial in the history of the psychosis. This is particularly true of the paranoid, who is very much on the alert and anxious to confirm his new-found delusive elaboration. It is vital to avoid, whenever possible, some confirmation by inept, or insensitive handling. Although the psychiatrist is immediately aware of the psychosis, there is a great tendency to deal with the patient on a rational level. Our questions, which are designed to elicit information about the details of the paranoid ideas, which incidentally are very irrelevant in the early stages, give the patient the idea that he is being silly, ridiculous, and stupid. The efforts to investigate and explore the delusional material only communicate to the patient the detective status of the doctor, who incidentally is someone the patient has never seen before and who usually appears at the height of the panic and can be easily involved in some of the patient's distortions. The detective role is easily attributed to him, since he appears unruffled and calm, asking perceptive questions which touch at the core of the difficulty and make the patient wonder how he knows so much about what has happened. What else can the patient think? Why should the person be recognized as "the doctor" unless he confines himself to concern about the patient's feelings, pains, discomforts, and expresses some empathic concern for the patient's welfare? This often may mean the avoidance of many questions which would supply information for the commitment procedure but, when asked, destroy the possibility of any benefit to be derived from the contact. On the contrary, the detective status is confirmed when after a few hours following the visit the patient finds himself incarcerated in a hospital (jail to him). Discussions with the family, a condescending knowingness about the patient, and a "phony" benevolence toward the patient's welfare are reacted to with violence and certainty about the doctor's malevolent interest in the patient. Too often the patient who feels that he has solved not only his problem but the world's problems with a god-like certainty is treated as a foolish child who is silly and ridiculous. This "not taking seriously" of the patient's psychotic formulation permits only one conclusion by the patient.

The approach to such a patient must be determined by our knowledge of the dynamics of the paranoid defensive elaboration and the life history of an individual who handles his basic needs by means of this mechanism. The cases were described to illustrate what I believe to be the favorable outcome of a paranoid episode. Hospitalization was avoided by the early efforts to deal with the significant feelings involved without further aggravation. When hospitalization is necessary, the details of the psychosis can be obtained from the family and the patient dealt with wholly on the basis of his troubled fears and anxieties and the need for hospital care to alleviate his suffering and anguish. Certainly this does not always relieve the psychiatrist from being considered a policeman, but at least it minimizes the possibility of this happening.

In both instances the first contacts were designed to encourage the expression of fears, suspicions, and hostile sentiments in an atmosphere which avoided fulfilling the patients' concerns. The therapist's attitude was nonaggressive, sympathetic, and sensitive to the patients' extreme fears and doubts which were verbalized. This took the therapist immediately out of the role of policeman or persecutor and put him into that of a potential helpmate. The content of the communications were not interpreted or dealt with rationally, but the doubts and feelings and fears, or, in other words, the emotional concomitants, were made note of. The second patient, after her recovery, informed me that she became convinced I was a friend when, after observing me closely, particularly when the cereal bowl broke, she saw me make no move to grab or force her into some corner. The first patient later on expressed his gratitude for being allowed to get off such hateful feelings without being criticized or threatened with hospitalization because of the intensity of his hostility. Interpretations should be avoided, and the therapist should move along with the patient rather than intrude himself. He will be notified when it is safe to move ahead. By all means the knowing, superior attitude, which implies that the patient is crazy, or that his ideas are ridiculous, should be avoided. False or overtly threatening moves on the part of the therapist may produce difficulties which can be overcome only with an enormous amount of effort.

Without accepting the patient's formulations, one must recognize that the psychosis is an effort, Herculean in nature, to solve a vital, pressing need for this person. As distorted as it may be, it is usually the final, decisive effort to secure some stability in the patient's unsettled world. These are not people who are just using projective defense mechanisms, but individuals who are frightened almost to death, fearful of recognizing any of their inadequacies, and indignant beyond imagination about what they feel to be the ruthless, calculated cruelties of mankind. The indignation and abuse are felt to be justified and often are. However, it must be taken seriously. The grandiosity is a defense and must be dealt with seriously, not flippantly or casually. It is a pillar of support in the structure of the psychosis and may be the last thing to be given up.

Most patients, I believe, would resolve their paranoid outbreaks, as they frequently do, if the environment, wittingly or unwittingly, did not consolidate and confirm them. Paranoid developments are never irreversible. During the later stages, with repeated confirmations and systematizations, they become fixed, and it becomes a Herculean task to alter them. However, in the early stages there are still some doubt and uncertainty, and the patient is relatively "ready to

(Continued on page 530)

23rd Annual

SCIENTIFIC ASSEMBLY

OF THE MEDICAL SOCIETY OF
THE DISTRICT OF COLUMBIA

HOTEL STATLER
SEPT. 29-30-OCT. 1, 1952

Medicine Marches On

Guest Speakers

Colonel Harold I. Amory, M.C., U.S.A.
Chief, Radiological Service, Walter Reed Army Hospital, Washington

Nelson W. Barker, M.D.
Head of a Section in Medicine, Mayo Clinic; Professor of Medicine, Mayo Foundation, Graduate School of the University of Minnesota, Rochester, Minn.

Captain Robert B. Brown, M.C , U.S.N.
Chief of Surgery, U. S. Naval Hospital, Bethesda, Md.

Bayard Carter, M.D.
Professor of Obstetrics and Gynecology, Duke University School of Medicine, Durham, N. C.

David M. Davis, M.D.
Professor of Urology, Emeritus, Jefferson Medical College, Philadelphia, Pa.

Edward D. Freis, M.D.
Adjunct Clinical Professor of Medicine, Georgetown University School of Medicine, Washington

Ferdinand C. Helwig, M.D.
Clinical Professor of Pathology and Oncology, University of Kansas School of Medicine; Pathologist, St. Luke's Hospital, Kansas City, Mo.

Robert H. High, M.D.
Associate Professor of Pediatrics, Temple University School of Medicine, Philadelphia, Pa.

J. William Hillman, M.D.
Assistant Professor of Orthopedic Surgery, Vanderbilt University School of Medicine, Nashville, Tenn.

Irene A. Koeneke, M.D.
Hertzler Clinic, Halstead, Kan.

Louis A. M. Krause, M.D.
Associate Professor of Medicine, University of Maryland School of Medicine, Baltimore, Md.

Champ Lyons, M.D.
Professor of Surgery and Chairman of the Department of Surgery, Medical College of Alabama, Birmingham, Ala.

Waldo E. Nelson, M.D.
Professor of Pediatrics, Temple University School of Medicine; Medical Director, St. Christopher's Hospital for Children, Philadelphia, Pa.

George T. Pack, M.D.
Attending Surgeon in charge of Gastric and Mixed Services, Memorial Hospital, New York, N. Y.

Irvine H. Page, M.D.
Director of Research, Cleveland Clinic, Cleveland, Ohio

Robert Sterling Palmer, M.D.
Head of the Hypertension Clinic; Physician to the Massachusetts General Hospital, Boston, Mass.

Walter L. Palmer, M.D.
Professor of Medicine, University of Chicago School of Medicine, Chicago, Ill.

Moses Paulson, M.D.
Assistant Professor of Medicine, Johns Hopkins University; Physician to the Johns Hopkins Hospital, Baltimore, Md.

Henry I. Russek, M.D.
Consultant in Cardiovascular Research, U. S. Public Health Service Hospital; Associate Cardiologist, Seaview Hospital, Staten Island, N. Y.

J. Harry Welch, LL.B., M.P.L.
Washington

Sidney C. Werner, M.D.
Assistant Professor of Clinical Medicine, Columbia College of Physicians and Surgeons; Assistant Attending Physician, Presbyterian Hospital, New York, N. Y.

SCIENTIFIC PROGRAM

All Sessions in the Presidential Ballroom, Hotel Statler

MONDAY, SEPTEMBER 29—MORNING SESSION

9:30 Basic Principles and Newer Methods in the Treatment of Duodenal Ulcer

Walter L. Palmer, M.D.
Professor of Medicine, University of Chicago School of Medicine

10:00 Clinico-Pathological Conference

Ferdinand C. Helwig, M.D., *Moderator*
Clinical Professor of Pathology and Oncology, University of Kansas School of Medicine; Pathologist, St. Luke's Hospital, Kansas City, Mo.

Participants

George T. Pack, M.D., Surgery
Attending Surgeon in charge of Gastric and Mixed Services, Memorial Hospital, New York City

Walter L. Palmer, M.D., Internal Medicine
Professor of Medicine, University of Chicago School of Medicine

Louis A. M. Krause, M.D., Internal Medicine
Associate Professor of Medicine, University of Maryland School of Medicine

Francis M. Forster, M.D., Neurology
Professor of Neurology, Georgetown University School of Medicine

Nelson W. Barker, M.D., Internal Medicine
Head of a Section in Medicine, Mayo Clinic; Professor of Medicine, Mayo Foundation, Rochester, Minn.

11:30 Recess for Luncheon

MONDAY, SEPTEMBER 29—AFTERNOON SESSION

2:00 Conservative Pelvic Surgery in the Female

Irene A. Koeneke, M.D.
Hertzler Clinic, Halstead, Kansas

2:25 Symposium on Relationship of Gastric Ulcer to Cancer

George T. Pack, M.D., *Moderator*
Attending Surgeon in charge of Gastric and Mixed Services, Memorial Hospital, New York City

Participants

Aubrey O. Hampton, M.D., Radiology
Chief Radiologist, Garfield Memorial Hospital, Washington

Ferdinand C. Helwig, M.D., Pathology
Clinical Professor of Pathology and Oncology, University of Kansas School of Medicine; Pathologist, St. Luke's Hospital, Kansas City, Mo.

Louis A. M. Krause, M.D., Internal Medicine
Associate Professor of Medicine, University of Maryland School of Medicine

Walter L. Palmer, M.D., Gastroenterology
Professor of Medicine, University of Chicago School of Medicine

Captain Robert B. Brown, Surgery
Chief of Surgery, U. S. Naval Hospital

Moses Paulson, M.D., Gastroenterology (Gastroscopy)
Assistant Professor of Medicine, Johns Hopkins University; Physician to the Johns Hopkins Hospital, Baltimore

4:00 RECESS

TUESDAY, SEPTEMBER 30—MORNING SESSION

9:30 RADIOIODINE AS A DIAGNOSTIC TOOL IN THYROID DISORDERS
Sidney C. Werner, M.D.
Assistant Professor of Clinical Medicine, Columbia College of Physicians and Surgeons; Assistant Attending Physician, Presbyterian Hospital, New York City

10:00 A CRITICAL EVALUATION OF ANTICOAGULANT THERAPY IN THE TREATMENT OF ACUTE MYOCARDIAL INFARCTION
Henry I. Russek, M.D.
Consultant in Cardiovascular Research, U. S. Public Health Service Hospital; Associate Cardiologist, Seaview Hospital, Staten Island, New York

10:25 RECESS

10:35 PROGNOSIS AND TREATMENT IN BENIGN AND MALIGNANT HYPERTENSION
Robert Sterling Palmer, M.D.
Head of the Hypertension Clinic; Physician to the Massachusetts General Hospital, Boston

11:05 CHRONIC RESPIRATORY DISEASES IN CHILDREN
Robert H. High, M.D.
Associate Professor of Pediatrics, Temple University School of Medicine

11:30 RECESS FOR LUNCHEON

TUESDAY, SEPTEMBER 30—AFTERNOON SESSION

2:00 ACTH AND CORTISONE IN THE ALLERGIC DISEASES
Grafton Tyler Brown, M.D.
Head of the Division of Allergy, Doctors Hospital, Washington

2:30 SYMPOSIUM ON PAIN IN THE EXTREMITIES
J. Ross Veal, M.D., *Moderator*
Professor of Cardiovascular Surgery, Georgetown University School of Medicine

PARTICIPANTS

J. William Hillman, M.D., Orthopedics
Assistant Professor of Orthopedic Surgery, Vanderbilt University School of Medicine

Nelson W. Barker, M.D., Internal Medicine
Head of a Section in Medicine, Mayo Clinic; Professor of Medicine, Mayo Foundation, Rochester, Minn.

James W. Watts, M.D., Neurosurgery
Professor of Neurosurgery, George Washington University School of Medicine

Colonel Harold I. Amory, Radiology
Chief, Radiological Service, Walter Reed Army Hospital, Washington

Darrell C. Crain, M.D., Arthritis
Assistant Clinical Professor of Medicine, Georgetown University School of Medicine

4:00 RECESS

WEDNESDAY, OCTOBER 1—MORNING SESSION

9:30 Resuscitation in Medical Shock Due to Metabolic Acidosis

Champ Lyons, M.D.

Professor of Surgery and Chairman of the Department of Surgery, Medical College of Alabama

9:55 Primary Hydronephrosis—Etiology, Symptomatology and Particularly Surgical Treatment

David M. Davis, M.D.

Professor of Urology, Emeritus, Jefferson Medical College of Philadelphia

10:25 Recess

10:35 Causes and Management of Abnormal Uterine Bleeding

Bayard Carter, M.D.

Professor of Obstetrics and Gynecology, Duke University School of Medicine

11:05 A Critical Evaluation of Biological and Chemical Tests for Pregnancy

Richard H. Fischer, M.D.

Research Associate, Department of Obstetrics and Gynecology, Research Foundation, Doctors Hospital, Washington

11:30 Recess for Luncheon

WEDNESDAY, OCTOBER 1—AFTERNOON SESSION

Symposium on the Conservation of Blood

2:00 Introduction

Herbert P. Ramsey, M.D.

Vice Chairman, Committee on Blood Banks, American Medical Association; President-elect, The Medical Society of the District of Columbia

2:10 Variation in Blood Volume in Chronic Illness

Champ Lyons, M.D.

Professor of Surgery and Chairman of the Department of Surgery, Medical College of Alabama

2:40 Recess

2:50 Replacement of Blood in Hypotension due to Hemorrhage

Irvine H. Page, M.D.

Director of Research, Cleveland Clinic, Cleveland, Ohio

3:20 Intra-arterial Transfusion

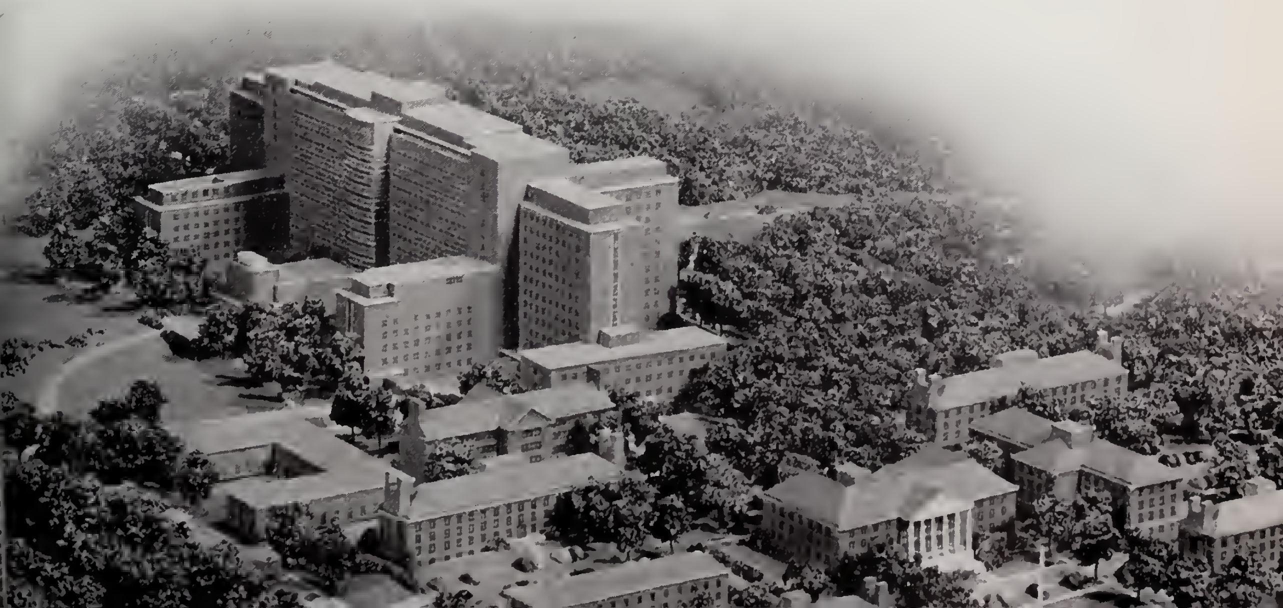
Donald Stubbs, M.D.

Clinical Professor of Anesthesiology, George Washington University School of Medicine

3:50 Question and Answer Period

4:00 Recess

New Clinical Center of National Institutes of Health, Bethesda, Md. (below)



Round Table Discussions

The Round Table Discussions, now a permanent feature of the Assembly, were planned in response to a demand for a scientific program of interest to physicians in the limited specialties. Physicians who wish to attend any of the following discussions should forward their reservations to the Committee on Arrangements, 22nd Annual Scientific Assembly, 1718 M Street, N.W., not later than September 22. Each Round Table will be limited to 50 participants.

TUESDAY, SEPTEMBER 30, 1952—2:00 to 4:00 P.M.

SECTION ON PEDIATRICS

Council Room, Hotel Statler

Symposium on the Dangers of Antibiotic Therapy

Waldo E. Nelson, M.D., *Moderator and Chief Discussant*
Professor of Pediatrics, Temple University School of Medicine

Participants

Robert H. High, M.D.
Associate Professor of Pediatrics, Temple University School of Medicine

Monroe J. Romansky, M.D.
Associate Professor of Medicine, George Washington University School of Medicine

John A. Washington, M.D.
Assistant Clinical Professor of Pediatrics, George Washington University School of Medicine

Question-and-Answer Period

TUESDAY, SEPTEMBER 30, 1952—2:00 to 4:00 P,M.

SECTION ON INTERNAL MEDICINE

Capital Room, Hotel Statler

Symposium on Hypertensive Heart Disease—Some of the Problems

Benjamin Manchester, M.D., *Moderator and Chief Discussant*
Assistant Professor of Medicine, George Washington University School of Medicine

Participants

Robert Sterling Palmer, M.D.
Head of the Hypertension Clinic; Physician to the Massachusetts General Hospital, Boston, Mass.

Henry I. Russek, M.D.
Consultant in Cardiovascular Research, U. S. Public Health Service Hospital; Associate Cardiologist, Seaview Hospital, Staten Island, N. Y.

Edward D. Freis, M.D.
Adjunct Clinical Professor of Medicine, Georgetown University School of Medicine

WEDNESDAY, OCTOBER 1, 1952—2:00 to 4:00 P.M.

SECTION ON OBSTETRICS

Council Room, Hotel Statler

SYMPOSIUM ON RUBELLA IN PREGNANCY

BAYARD CARTER, M.D., *Moderator and Chief Discussant*
Professor of Obstetrics and Gynecology, Duke University School of Medicine

PARTICIPANTS

Clarence K. Fraser, M.D., Obstetrics
Associate in the Department of Obstetrics and Gynecology, George Washington University Hospital

Frank D. Costenbader, M.D., Ophthalmology
Attending in Ophthalmology, Children's Hospital

Frederic G. Burke, M.D., Pediatrics
Professor of Pediatrics, Georgetown University School of Medicine

Harry J. Welch, LL.B., M.P.L., Legal Medicine
Washington

WEDNESDAY, OCTOBER 1, 1952—2:00 to 4:00 P.M.

SECTION ON UROLOGY AND PLASTIC SURGERY

Capital Room, Hotel Statler

SYMPOSIUM ON PLASTIC SURGERY OF THE LOWER URINARY TRACT

DAVID M. DAVIS, M.D., *Moderator and Chief Discussant*
Professor of Urology, Emeritus, Jefferson Medical College

PARTICIPANTS

Operation for Cryptoörchism—**Lloyd G. Lewis, M.D.**
Professor of Urology, Georgetown University School of Medicine

Operation for Epispadias—**W. Dabney Jarman, M.D.**
Senior Attending in Urology, Garfield Memorial Hospital, Washington

Operation for Hypospadias—**William C. Meloy, M.D.**
Assistant Professor of Surgery, George Washington University School of Medicine; Chief Plastic Surgeon, George Washington University Hospital, Washington

Motion Pictures

Physicians in attendance at the 23rd ANNUAL SCIENTIFIC ASSEMBLY will have an opportunity of viewing the best scientific films availabe. Included will be motion pictures produced by Washington physicians.

The scientific program was, as usual, taken into consideration in selecting this year's films. Motion pictures will be shown in the Town Room on the mezzanine of the Hotel Statler.

A daily schedule of motion pictures and the time they will be shown will be distributed daily to those who register.

The Scientific Exhibit

The Scientific Exhibit will be on display in the South American and the District Rooms of the Hotel Statler. Below is a list of the exhibits and the sponsors:

Titles	*Exhibitors*
ANGIOCARDIOGRAPHY	Albert D. Kistin, M.D., Elizabeth H. Hill, M.D., Asher Woldow, M.D., and Edward L. Rea, M.D., George Washington University School of Medicine and Gallinger Municipal Hospital
ARTERIOVENOUS FISTULAS AND FALSE ANEURYSMS IN KOREAN WAR WOUNDED	Brig. General Sam F. Seeley, Lt. Colonel Carl W. Hughes, and Captain Edward J. Jahnke, Walter Reed Army Medical Center
CHANGING PATTERNS IN THE IN VITRO SUSCEPTIBILITY OF MICROÖRGANISMS TO VARIOUS ANTIBIOTICS	Colonel Dwight M. Kuhns, M.C., Matthew H. Fusillo, M.D., and Monroe J. Romansky, M.D., Walter Reed Army Hospital
CHEST WALL DEFORMITIES AMENABLE TO SURGERY	Marshall C. Sanford, M.D., Children's Hospital
CLINICAL CENTER FOR MEDICAL RESEARCH	Federal Security Agency, United States Public Health Service
CLINICAL CHANGES IN PEOPLE WHO RECEIVE RADIUM SALTS THERAPEUTICALLY, 1915–1930	Lieutenant William B. Looney, M.C., U.S.N., U. S. Naval Hospital
COMMON COMPLICATIONS OF MYOCARDIAL INFARCTION—DIAGNOSIS AND TREATMENT	A. Henry Clagett, Jr., M.D., Chief, Medical Service, Veterans Administration Hospital, Wilmington, Delaware
CONSERVATION OF HEARING AND SPEECH CLINIC	Leroy L. Sawyer, M.D., James P. Lyons, M.D., T. Frasier Williams, M.D., William H. Jenkins, M.D., Lorraine Amos, M.A., and Shirley Stein, M.A., Episcopal Eye, Ear and Throat Hospital
CORRELATION OF THE CLINICAL, RADIOLOGIC AND PATHOLOGIC FACTORS OF DIVERTICULITIS	Aubrey O. Hampton, M.D., and Alexander Goulard, Jr., M.D.
CORTISONE AND ACTH IN BLOOD DYSCRASIAS	Oscar B. Hunter, Jr., M.D., and Paul C. Kiernan, M.D.
INJURIES OF THE MEDIAN, ULNAR AND RADIAL NERVES: ANATOMY AND DIAGNOSTIC PROCEDURES	Othmar Solnitzky, M.D., Department of Anatomy, Georgetown University School of Medicine
MANAGEMENT OF DIARRHEA IN INFANTS AND CHILDREN	Sidney Ross, M.D., Frederic G. Burke, M.D., E. Clarence Rice, M.D., Robert H. Parrot, M.D., Research Foundation, Children's Hospital
NEW FROZEN SECTION TECHNIC	Vannevar Bush, Eng.D., and Richard E. Hewitt, Research Assistant, Carnegie Institution of Washington; Theodore Winship, M.D., and Thomas Bradley, M.D., Garfield Memorial Hospital
POST SUBTOTAL GASTRECTOMY SYNDROME	Paul C. Kiernan, M.D., and John C. Sullivan, M.D., Georgetown University Hospital and Gallinger Municipal Hospital
PREVENTION OF ALLERGIC TRANSFUSION REACTIONS	Harry E. Ferris, D.D.S., Seymour Alpert, M.D., and Charles S. Coakley, M.D., Department of Anesthesiology, George Washington University Hospital
PROGESTERONE METABOLISM II: PREGNANEDIOL EXCRETION DURING NORMAL PREGNANCY	Richard H. Fischer, M.D., and Stanley P. McColgan, M.S., Research Foundation, Doctors Hospital

Titles	*Exhibitors*
Radioisotopes in Medicine:	
(A) Plasma Volume and Blood Volume Studies; a Comparison of Available Techniques	Lieutenant L. W. Brady, M.C., U.S.N., U. S. Naval Hospital
(B) The Use of Radioactive Colloidal Gold (AU-198) in Pleural Effusions and Ascites Associated with Malignancy	Commander E. R. King, M.C., U.S.N., U. S. Naval Hospital
(C) The Effect of Total Body Ionizing Radiation upon Cell Division	Commander R. B. Williams, M.C., U.S.N., U. S. Naval Medical Research Institute
Simplified Pulmonary Function Studies	Captain James C. Syner, M.C., U.S.A., Walter Reed Army Medical Center
Surgical Anatomy of the Portal System* (by invitation)	John L. Madden, M.D., John M. Loré, Jr., M.D., and Frank P. Geruld, M.D., St. Clare's Hospital, New York City
Systemic Lupus Erythematosus† (by invitation)	John R. Haserick, M.D., A. C. Corcoran, M.D., Harriet Dustan, M.D., and Lena A. Lewis, M.D., Cleveland Clinic, Cleveland, Ohio
Total Care for the Cancer Patient	Jeanne C. Bateman, M.D., and Calvin C. Klopp, M.D., George Washington University Cancer Clinic
Waterproof Plaster Less Obvious Foot Brace	Milton C. Cobey, M.D.

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* This Scientific Exhibit, presented at the 1952 Annual Session of the AMA in Chicago in June, 1952, was awarded the Gold Medal for originality of presentation.

† This Scientific Exhibit was awarded the Hektoen Medal at the AMA meeting in June, 1952.

Public Health Exhibit

The Public Health Exhibit will, as usual, be situated in the Federal Room. The Exhibit will be open to the general public daily from 9:30 a.m. to 5 p.m. and on Tuesday evening from 7:00 p.m. to 8:15 p.m. Doctors and their patients and friends are invited to view this Exhibit. Following is the list of exhibits and their sponsors:

Titles	*Exhibitors*
Alcoholic Rehabilitation Program	ARP Clinic, Washington
Alcoholism	Washington Committee for Education on Alcoholism
Atomic Bomb and Ionizing Radiation	Armed Forces Institute of Pathology
Cancer of the Colon and Rectum	District of Columbia Division, American Cancer Society, Inc.
Cerebral Palsy	District of Columbia Society for Crippled Children, Inc.
Check Your Chest X-Ray Readings Against the Experts	District of Columbia Tuberculosis Association
Food and Drug Administration Protects the Public Health and Pocketbook	Food and Drug Administration, Federal Security Agency
Health Security for the Insecure	Hospital Service Agency of the National Capital Area
Helps for Hearing	Washington Hearing Society and American Hearing Society
Home Accident Quiz	United States Public Health Service
Let's Do It Together	Health Section, United Community Services
Listen to Your Heart	Washington Heart Association
Look for Diabetes and You Will Find It	Diabetes Association of the District of Columbia, Inc.
Management of the Poliomyelitis Patient with Respiratory Difficulty	District of Columbia Chapter, National Foundation for Infantile Paralysis, Inc.

Titles	*Exhibitors*
Medical Service of the District of Columbia	Medical Service of the District of Columbia
Scope of the American Red Cross Blood Program	District of Columbia Chapter, American Red Cross
Services of the Health Department	District of Columbia Health Department
The Visiting Nurse at Work	The Instructive Visiting Nurse Society
Vision Testing	District of Columbia Society for the Prevention of Blindness
Vocational Rehabilitation Is a Team Job	District of Columbia Rehabilitation Service

Special Exhibit

The Special Exhibit, sponsored by the American Heart Association, is a composite of national, state and local Heart Association activities. Shown will be the achievements of the Scientific Council of the American Heart Association, progress of its research support program; the professional education program; publications of the Association; and some program accomplishments of state and local Heart Associations.

Ten new natural latex rubber models illustrating normal and diseased conditions of the heart have been prepared for this exhibit by Abram Belskie, noted medical sculptor.

Registration

Arrangements have been made to register members of the Medical Society prior to the opening of the Assembly at the Society's Executive Offices on Thursday, September 25, and Friday, September 26, between 9:00 a.m. and 5:00 p.m.

The Registration Section at the Hotel Statler will be open at 8:30 a.m. on Monday, September 29. Visiting physicians, medical officers of the various branches of Government service, and Society members not previously registered may register and secure their badges at the Registration Section. Invitations have been extended to residents, interns, dentists, pharmacists, medical students, and others to register for the Assembly at the Hotel. No one will be admitted to the scientific sessions or exhibits without a badge.

There will be a registration fee of $3.00 for visiting physicians and non-members of the Society, except officers of the Army, Navy and Public Health Service, and physicians employed by the Veterans Administration and other Government agencies, who will be admitted without paying a registration fee.

Members planning to attend the Medical Society's luncheon on the opening day of the Assembly, Monday, September 29, must register and secure their tickets at the Society's Executive Offices on Thursday or Friday before the opening of the Assembly. Each Active member is entitled to one ticket without charge *as long as they last.* Associate members and non-members of the Society may purchase luncheon tickets at a cost of $3.50 each.

Tickets for the luncheons given by the George Washington University Medical Society and the Georgetown University Medical Alumni Association may be obtained at the Registration Section.

Assembly Calendar

Meetings at the Hotel Statler

MONDAY, SEPTEMBER 29, 1952

8:30 A.M.: Registration

9:30 A.M.–11:30 A.M.: Scientific Program*

12:15 P.M.–1:30 P.M.: Medical Society Luncheon, Presidential Ballroom
Speaker: Paul B. Magnuson, M.D., Chairman, The President's Commission on the Health Needs of the Nation

2:00 P.M.–4:30 P.M.: Scientific Program

7:00 P.M. (6:30 P.M. Cocktails): Women's Medical Society Dinner, Chinese Room, Mayflower Hotel
Speaker: Irene A. Koeneke, M.D., Hertzler Clinic, Halstead, Kan.
Subject: "A Woman Physician Visits South America" (Movies)

TUESDAY, SEPTEMBER 30, 1952

9:30 A.M.–11:30 A.M.: Scientific Program

12:15 P.M.–1:30 P.M.: George Washington University Medical Society Luncheon, Presidential Ballroom
Speaker: John A. Trautman, M.D., Director, Clinical Center, National Institutes of Health, Public Health Service
Subject: "The Clinical Center"

12:15 P.M.–1:30 P.M.: Harvard University Medical Alumni Luncheon, Capital Room

12:30 P.M.: Luncheon for wives of visiting physicians, sponsored by the Woman's Auxiliary to the Medical Society of the District of Columbia

2:00 P.M.–4:00 P.M.: Round Table Discussions

2:00 P.M.–4:30 P.M.: Scientific Program

8:15 P.M.: Public Meeting, Presidential Ballroom, sponsored by the American Heart Association
Panel Discussion on the Three R's (research, recovery and rehabilitation) of Heart Disease
Moderator: Lawrence Spivak, Co-producer of NBC's "Meet the Press"
Keynote Speaker: Keen Johnson, former Governor of Kentucky and immediate Past President of the Kentucky Heart Association
Physician Participants: Robert W. Wilkins, M.D., Associate Professor of Medicine, Boston University School of Medicine; E. Cowles Andrus, M.D., Associate Professor of Medicine, Johns Hopkins University; and Theodore G. Klumpp, M.D., President, Winthrop-Stearns, Inc.
Lay Participants: Myrna Loy†, member-at-large of U. S. National Commission to UNESCO; Ernestine Gilbreth Cary†, author of "Cheaper by the Dozen"; and Watson Davis of *Science Service.*

† Acceptance not final

WEDNESDAY, OCTOBER 1, 1952

9:30 A.M.–11:30 A.M.: Scientific Program

12:15 P.M.–1:30 P.M.: Georgetown University Medical Alumni Luncheon, Presidential Ballroom
Speaker: Senator Karl E. Mundt of South Dakota

2:00 P.M.–4:00 P.M.: Round Table Discussions

2:00 P.M.–4:30 P.M.: Scientific Program

(Continued on following page)

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* The Scientific Program will be presented in the Presidential Ballroom throughout the meeting.

8:00 P.M. (7:00 P.M. Cocktails): Annual Dinner, Presidential Ballroom

Speaker: Vannevar Bush, Eng. D., President, Carnegie Institution of Washington

A special feature will be awarding Certificates for Meritorious Service to Frank D. Costenbader, M.D., and W. Cabell Moore, M.D.

Dancing following the program until 1 A.M.

The Technical Exhibit

The Technical Exhibit will be on display in the Congressional Room and the Foyer. A list of the exhibitors follows:

Abbott Laboratories	(Booth 31)
Aloe, A. S., Company	(Booth 41A)
Ames Company, Inc.	(Booth 46)
Arcum Pharmaceuticals, Inc.	(Booth 44)
Ayerst, McKenna & Harrison, Ltd.	(Booth 20)
Beuchler's	(Booth 28)
Bilhuber-Knoll Corporation	(Booth 14)
Borden Company	(Booth 7)
Buck, A. J. & Son	(Booth 4)
Burroughs, Wellcome & Co., Inc.	(Booth 38)
Burton, Parsons & Company	(Booth 9)
Camel Cigarettes	(Booth 24)
Ciba Pharmaceutical Products, Inc.	(Booth 21)
Davies, Rose & Company, Ltd.	(Booth 33)
Doak Company, Inc.	(Booth 11)
Doho Chemical Corporation	(Booth 22)
Fleet, C. B., Company, Inc.	(Booth 25)
Gibson Company	(Booth 3)
Haskell, Charles C., & Co., Inc.	(Booth 35)
Hoffmann-La Roche Company	(Booth 42)
Kloman Instrument Company, Inc.	(Booth 39)
Lederle Laboratories	(Booth 5)
Liebel-Flarsheim Company	(Booth 18)
Lilly, Eli, & Company	(Booth 30)
Maxwell & Tennyson	(Booth 34)
Mead Johnson & Company	(Booth 29)
Merrill, William S., Company	(Booth 6)
Merck and Company, Inc.	(Booth 43)
National Drug Company	(Booth 2)
Parke, Davis and Company	(Booth 36)
Peoples Drug Stores, Inc.	(Booth 37)
Pet Milk Company	(Booth 47)
Pfizer, Charles, and Company, Inc.	(Booth 45)
Philip Morris & Company, Ltd., Inc.	(Booth 32)
Roerig, J. B., & Company	(Booth 48)
Sanborn Company	(Booth 26)
Sandoz Pharmaceuticals	(Booth 16)
W. B. Saunders Company	(Booth 23)
Schering Corporation	(Booth 40)
Searle, G. D., & Company	(Booth 1)
Sharp & Dohme, Inc.	(Booth 12)
Smith, Kline and French Laboratories	(Booth 27)
Squibb, E. R., & Sons	(Booth 15)
U. S. Vitamin Corporation	(Booth 13)
Vanpelt and Brown, Inc.	(Booth 41)
Walker Laboratories, Inc.	(Booth 8)
White Laboratories, Inc.	(Booth 17)
Williams & Wilkins Company	(Booth 19)
Winthrop-Stearns, Inc.	(Booth 10)

President's Page

OUR HOSPITALS

Thank God for our fine Washington hospitals. Unfortunately, like most hospitals, they are confronted with vexing problems, largely financial in nature. Rising costs have led to tremendous increases in charges to patients, so that patients with serious illnesses realize the high cost of medical care. Group Hospitalization is providing a certain amount of relief to patients in regard to one factor, cost of room and board, but this doesn't help the hospital particularly. I have no solution to offer, but I have observed that there seems to be undue wastage in several respects. Surely, hospital administrators are aware of this.

Our District Government is harming many of our hospitals by not adequately remunerating them for the care of medically indigent patients on the house services. Granted that Gallinger Hospital is the municipal hospital and rightly should have the majority of the patients, it remains also true that the quality of our "private" hospitals is greatly enhanced by ward services, which are of great value in the training programs for medical students, interns, residents and nurses. Such programs are fundamental in maintaining the high standard of medical care throughout the country, since our young doctors and nurses finally go out from our hospitals to take care of the sick everywhere.

If our hospitals were not now filled to capacity, they would be in dire straits indeed. And yet one wonders whether some patients are hospitalized who might be cared for just as well at home. Perhaps for our own convenience we rush them into a hospital unnecessarily, thus doing an injustice to both the patient and Group Hospitalization. On the other hand, and in partial justification, it must be recalled that Washington is peculiar in the large number of Government workers and others who live alone and have no one to look after them. Furthermore, in many instances both husband and wife work, while, in addition, domestic help is difficult to obtain these days.

One thing that concerns many of our members is the apparent tendency of some hospitals to attempt to establish diagnostic clinics for pay patients. In a great metropolitan area such as ours there really appears to be little need for such clinics. Our city is full of fine general medical men and specialists well qualified in all diagnostic technics. Is it possible that the establishing of such clinics is an attempt to help cut deficits with "cheap" professional services? No matter what the answer may be, that idea is frequently expressed, perhaps with some justification.

The hospitalization of a patient is part of the medical record of that patient, and often an important part. Supplying the attending physician with a summary of the record would be a service to both the physician and the patient. That was done for a while by one hospital and discontinued because of lack of clerical help. A modest charge was levied on the patient for this work. May the time come when all hospitals will render this service. Not only would it help the physician to keep a complete record of his patients, but the preparation of summaries by residents would be valuable experience for them.

These remarks are disjointed, I know, but they pose a few of the problems confronting our splendid hospitals.

Wallace M. Yater

Editorials

WHAT IS RIGHT WITH WASHINGTON*

Why should one ask what is right with Washington? Most people in most cities assume that the balance of their city is on the plus side, or presumably they would try to live elsewhere. Yet Washington is painted at times, and especially just now, in such a light that the question seems in order. Let us admit Washington is unique. It is a synthetic city, planned and built to be the seat of the National Government. Its citizens have no franchise, and many who work here look on themselves as really residents of Dallas, Seattle, or Boston, as having no roots and precious little responsibility for what kind of a place they are "temporarily" living in.

With all its peculiarities, though, there are many of us who love Washington and are glad to live here. It is the most beautiful city in this country, and perhaps in the world. It is a healthful place in which to live, despite all that is said about the climate. It leads in per capita expenditures for health, the death rate is low in comparison with many cities, and the Health Department is progressive and efficient in protecting the health of the people.

It is a safe city to live in. Crime statistics are a notoriously unsafe index of comparison, but even if honest reporting does push up our crime statistics, the city is still an orderly one. The Police Department has an interest in preventive work, as in the Boys' Clubs which it operates. There is no red light district, and if there is gambling, can any city cast the first stone?

Washington has many educational facilities. The public school system has had its troubles, but the children are well educated and the teachers well paid. There are many universities and other schools of higher education, not to mention many lectures and the magnificent National Gallery of Art and other museums, which are available at low cost or free of charge. Our newspapers are independent, honest, and public-spirited.

The churches of all faiths are active and socially minded. The St. Vincent de Paul Society, for instance, supports the Catholic chaplains in the District institutions, and the Protestant and Jewish groups perform a like service. Although there are many "strangers," Washington is a church-going city. Many Protestant churches find it necessary to hold two morning services.

The community activities are numerous, despite the lack of voice which the residents suffer. The citizens' associations can make themselves heard on occasion, as when recently they brought about the rejection of the Budget Bureau's plan for reorganization of the District Government. There are many recreational activities, governmentally and privately supported. The Community Chest and its numerous Red Feather agencies, though not supported as they deserve, perform a valuable function. The Department of Public Welfare does excellent work in spite of having all too little funds.

There are many small communities within the District, with a considerable degree of neighborliness. The state societies do much to make the newcomer feel at home. The Government workers, who constitute a substantial proportion of the population, are honest, decent, hard-working

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* This is a summary of the remarks made by Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital, Washington, before the Annual Meeting of the Social Hygiene Society of the District of Columbia, May 2, 1952.

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

citizens; many of them have chosen Government work as a career, and look on themselves as bona fide Washingtonians (in the metropolitan sense, perhaps!).

A witty friend of mine said to me when he heard long ago that I was coming here, "Washington is a place where everyone is welcome and no one is missed." Whether one is to be missed after he leaves is of secondary importance. It does add much to one's peace of mind, however, to feel welcome. That one can do easily in Washington—a city with drawbacks as all cities have, but a healthful, orderly, beautiful and friendly place in which to live!

A COOPERATIVE APPROACH TO REHABILITATION

Dr. Josephine Buchanan's article on the progress and achievements of the Rehabilitation Service at Gallinger Hospital should be helpful not only to physicians but to civil administrators and the citizens of the community as well.

The concept of total patient care that is so important to the success of any rehabilitation program must become the aim of all physicians, particularly those now learning the practice of medicine. For the past decade physicians have been more concerned with specific diagnostic findings than with the patient as a human being; however, with the ever increasing incidence of chronic disabling diseases for which there is no specific or dramatic cure, the physician must utilize every available resource to maintain these patients mentally and physically in their optimum state. This all-inclusive type of treatment will require the close coöperation of a team of professional workers. Included will be the physiatrist, physical and occupational therapists, and the vocational counselor, as well as various medical specialists. Particularly striking is the observation that, when effective rehabilitative efforts are instituted, the patient's mental state is improved dramatically. It is possible that many of our patients with a chronic disease are as depressed by neglect as they are by their disease. The patient's physician, as the coördinator of the therapeutic team, above all others must be proficient in the art of total patient care. Unfortunately, the advent of chemotherapeutic agents has provided an easy escape mechanism for the hurried and harried physician psychologically unprepared to accept the responsibility of total patient care.

Civil administrators, particularly those responsible for the health and welfare of their community, are beginning to appreciate the tremendous savings in terms of human and financial resources that are made possible by the institution of good rehabilitation programs. The statistics presented in Dr. Buchanan's paper demonstrate conclusively that it is more economical to provide facilities for rehabilitation than to go on supporting, on welfare rolls, patients in need of rehabilitation. Even when only the goal of self care can be reached, this represents a very tangible economic gain because costly hospital beds are released for other chronically ill patients. What better investment can a municipality make than one which improves the health, welfare, and productivity of its disabled citizens at a price that is significantly less than that required to maintain them in a disabled state. Many communities have already established rehabilitation centers. Proud accounts of their achievements have been published.

It is the responsibility of the citizens of the community to see to it that their municipal administrators provide the facilities needed for rehabilitation. Such facilities should be made available not only to indigent persons but also to members of the so-called middle class who may become disabled or indigent. When they become the victims of chronic disease, disability and indigency often follow. Many proud and hard-working citizens come to Gallinger Hospital for care because their resources have been depleted by one of the chronic diseases. We are only too happy to provide for their care, but how much better it would be if they had been given help before they became hopelessly disabled.

Unfortunately our program at Gallinger Hospital stresses primarily the restorative aspects of rehabilitation. Many of our patients when they arrive have passed beyond the stage where these types of services can be of maximum benefit. The backlog of cases in the District of Columbia in need of rehabilitation cannot be coped with until our existing facilities are expanded. Unless efforts are directed at the early diagnosis, prevention, and treatment of chronic disease, the above situation cannot be expected to change. Multiphasic screening for chronic disease would do much to alleviate these conditions.

The Rehabilitation Service at Gallinger Hospital owes its existence to the Chronic Disease Division of the United States Public Health Service and to the District Vocational Rehabilitation Service. The tremendous success of the program has largely been due to the able leadership of its director and the untiring efforts of her co-workers whose enthusiasm and great feeling for their patients have been as infectious as they have been refreshing. To all of them, our thanks, and we sincerely hope that the physicians, administrators and citizens of the District of Columbia will see to it that their good work is carried on for many years to come.

JOSEPH F. FAZEKAS, M.D.
Chief of Staff, Gallinger Municipal Hospital

DETAIL MEN

The various pharmaceutical companies spend large sums of money in research, in the manufacture of drug preparations, and in acquainting the medical profession with their products. Lately they have done particularly important work in the development and manufacture of the antibiotics, which has reduced their cost and allowed more extensive use of these drugs. They pay substantial salaries to educated and well prepared representatives, who personally call on individual doctors in order to acquaint them with recent pharmaceutical advances. Known to the doctors as "detail men," these representatives deserve consideration and respect. They must make many calls each day, and they should be admitted to the doctor's office in their regular turn (as are patients), depending upon their arrival in the waiting room. The doctor will be well repaid for a 5-minute interview, because he will frequently be able to add to his store of information.

The detail man on his part should make his visit brief in order to conserve the doctor's time. He must remember that during intervals between the arrival of patients the doctor occupies his time by writing, reading, or by resting, and prolonged interviews with detail men may cause annoyance. The most effective call includes a discussion of only 1 preparation for consideration by the doctor. The enthusiastic detail man who presents 4 or 5 preparations, and who loads the doctor's desk with pamphlets, blotters and inadequate samples, has often wasted his time, because the confused doctor promptly consigns all these things to the wastepaper basket upon the departure of his guest.

Speaking of samples, the average sample of 1 or 2 tablets, or a half ounce of liquid, is usually thrown away. Multiply the number of these samples by the number of doctors receiving them and the total is enormous. These free samples add to the price the patient pays for the preparation when prescribed. It seems to me that a more sensible plan would be for the detail man to write to his company that Doctor So-and-So has expressed an interest in such and such a preparation and would probably try it out if he were to receive a sufficient amount to do so. The doctor would be complimented and impressed and some poor patient would benefit.

The detail man must be not only an ambassador for his firm, but also a diplomat. He should inform himself previously as to the specialty of the doctor, and, of course, not offend the doctor by asking him. He should avoid appearing to instruct the doctor, because doctors do not like instruction from laymen. He must not refer to other doctors in a derogatory manner—they may be golf companions of the one he is interviewing. The relationship between the detail man and the doctor should be one of mutual respect and regard, and should be governed by the rules of good manners.

James A. Gannon, M.D.

In and Out of Focus

BY THE OBSERVER

The Assembly*—** One of the milestones in the ***1952 Model Medical Society's progress was the inauguration of the Annual Scientific Assembly in 1929. The record shows that it came into being largely because of the energetic enterprise of Dr. Charles Stanley White.

For a number of years the Assembly was held in the Society's building. Exhibits were displayed in the library, in the lobby on the first floor, and in the basement. Scientific sessions were, of course, held in the auditorium. Crowding was unavoidable and dissatisfaction with the arrangements, especially the space available for exhibits, was frequently expressed.

When your Observer first arrived on the local scene in 1938, he proposed that the 1939 Assembly be moved from the Society's building to the Mayflower Hotel. With some trepidation, the Executive Board and the Society agreed. As is now well known, the Assembly fared better than anticipated, especially from a financial point of view.

There were a number of innovations at the 1939 Assembly which have proved their worth in the intervening years.

One of these was the luncheons sponsored by the George Washington Medical Society and the Georgetown University Medical Alumni Association. These luncheons supplemented one given by the Society on the opening day and were held on the second and third days of the Assembly. It had long been the custom of the Society to provide a "free" luncheon for the membership sometime during its annual meeting. As the Society's membership grew and the cost mounted, it became a major expenditure—at the present time somewhere in the neighborhood of $1,500. Costly though it is, succeeding Committees on Arrangements have agreed that it is a good investment.

The Public Meeting was also initiated at the 1939 meeting. Although it has been a source of many headaches because of the difficulty of developing programs which would attract large numbers of the laity, it is now a permanent feature of the Assembly.

Other features that year were merely variations or an expansion of what had been put on in the Society's building. They included the Scientific and the Technical or Commercial Exhibits and the Annual Dinner.

By contrast, the 1952 Assembly is a vast improvement over the 1939 model. No longer held at the Mayflower, it was moved to the Statler Hotel in 1946. The Statler is unusually well equipped for conventions and, except for the lack of much needed space, has been most satisfactory to the Society. Future Committees on Arrangements will be hard put to find a solution to the space problem as there seems little prospect that a municipal auditorium or a larger hotel will be built in the very near future.

The Public Health Exhibit came into existence in 1940. This exhibit has attracted wide public interest, as has the Special Exhibit, which is presented by the sponsors of the Public Meeting. Last year the World Health Organization assumed the sponsorship for the Meeting and the Exhibit, the year before it was the Blue Cross-Blue Shield Commission. This year it will be the American Heart Association.

In addition to the regular scientific program, which is, of course, the heart of the ASSEMBLY, Round Table Discussions have been added. They were enthusiastically received on their initial appearance in 1951, and, as a result, their inclusion as a permanent part of the program was a foregone conclusion.

The ASSEMBLY is unusual because it is sponsored by a state medical society whose jurisdiction is confined to a single city. Were it not for the fact that the ASSEMBLY attracts a large number of physicians outside of Washington, it would not be the highly successful meeting it is today. Registrants have always included a sizable group of Government physicians, medical officers in the armed forces stationed in or about the District, Veterans Administration physicians, and private practitioners from a half-dozen nearby states.

It would perhaps be more exact to describe the ASSEMBLY as a regional or sectional meeting. As such it stands near the top.

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An Historic Decision No one will deny the historic significance of the action taken by the Society in June, 1952 when, by a mail vote, it adopted the following resolution:

RESOLVED, that no qualified physician applying for membership in the Society shall be denied membership because of race, creed or color.

For the information of members who have not kept abreast of developments, your Observer has prepared a review of events which culminated in the above action.

March 1, 1950:* The Executive Board reported that, shortly before the 18th ANNUAL SCIENTIFIC ASSEMBLY (1947) a petition was received signed by members of the Society urging that members of the Medico-Chirurgical Society be invited to attend scientific sessions of the ASSEMBLY. The Board directed that the signers be informed that no qualified doctor of medicine or student of a recognized medical school had ever been denied admission to the Society's scientific sessions. Subsequently, members of the Medico-Chirurgical Society were invited to the 19th and 20th ANNUAL SCIENTIFIC ASSEMBLIES, as were the faculty and medical students of Howard University School of Medicine.

The Board also reported that late in June, 1949 a letter had been received from Dr. W. Montague Cobb, chairman of a special committee appointed by the Medico-Chirurgical Society, requesting a conference with representatives of the District Medical Society. A conference was held, attended by President John Minor and the Secretary of the District Medical Society, and by President John Sinclair Perry, Dr. Cobb, and Dr. Edward Mazique of the Medico-Chirurgical Society. Dr. Cobb, who was spokesman, said that the present situation in the District was unsatisfactory to his group, that other Southern medical associations were accepting colored physicians as members. Dr. Minor explained that neither he nor the Secretary could speak for the Society but that they would convey the views expressed to the Executive Board.

Discussions were held by the Board at many subsequent meetings. The Board finally voted that an invitation to attend the regular scientific meetings of the Society be extended to members of the Medico-Chirurgical Society; also, that a joint committee consisting of representatives of both medical societies be established, the latter to devote its attention to community health problems in which both groups have a logical interest.

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* This and subsequent italicized dates are those on which the Society held business meetings.

The Society concurred in these recommendations.

March 7, 1951: The Executive Board reported that the membership of Negro physicians had come up from time to time in the meetings of the joint committee of the District Medical Society and the Medico-Chirurgical Society. The Board had finally decided to recommend to the District Medical Society that a communication be sent to all Active and Life members stating that "there is nothing in the Society's Constitution and By-laws which bars the election of Negro physicians from membership; that while no application from a Negro physician has been filed with the Society for many years, the Board desires to determine the attitude of the Society's membership in the event that an application is received."

If the proposed poll were approved, the Board explained, members would be sent a form indicating thereon their answer ("Yes" or "No") to the following question: "Are you in favor of the election of qualified Negro applicants to membership in the Medical Society of the District of Columbia?" Members would be required to return their ballots not later than April 1, 1951. Ballots would be counted by members who are not officers of the Society or members of the Executive Board or of the Board of Censors. There would be no identifying marks on the ballot and the self-addressed envelope enclosed would be without identification. Results of this inquiry would be made known to the Society at the Annual Business Meeting held on May 2, subsequently the Board of Censors would be notified of the results.

The Society approved these recommendations.

May 2, 1951: The Board reported that forms had been sent to 1,381 Active and Life members requesting a "Yes" or "No" answer to the above question. Of the 966 members who returned their forms, 674 voted "Yes," 290 voted "No," and 2 forms were not counted because the "votes" were qualified. The tellers were: Drs. Harry Zehner, Ernest H. Aschenbach, Herbert S. Gates, John W. Latimer, Jr., Robert T. Morse, and Edward W. Nicklas. The Board informed the Society that it would notify the Board of Censors of the result of the poll immediately following this meeting.

March 5, 1952: Four applications, it was reported by the Executive Board, had been received from Negro physicians. They had been handled in a routine manner. The Board of Censors, to whom the applications were referred, had come to the conclusion that while the Society's Constitution and By-laws did not prohibit the election of a qualified physician, regardless of race, that in its 134 years of existence no Negro physician had been elected to membership in the Society. The Board did not feel that in the circumstances it could act on the basis of the opinion poll and recommended that a formal vote be taken which would in effect be a mandate.

The Executive Board concurred and voted to recommend to the Society that a vote be taken on the resolution, quoted in the second paragraph of these comments, on April 2, 1952 in the Society's building and that the "polls" be open from 9 a.m. to 5 p.m.

The Board's recommendation was approved.

May 7, 1952: Developments since the last meeting were reported by the Executive Board. Upon its instructions, the tellers, Drs. Harry Zehner, Robert H. Groh, William H. Hanna, and Alexander L. Russell, had impounded the ballots in the April 2 vote in a locked box to be opened in the presence of the tellers at a later date.

"It became evident on the day of the referendum," the Board's report said, "that a comparatively small proportion of the membership had voted." This was a source of concern, the Board continued, because if the vote were too small no one would be satisfied with the outcome, regardless of whether a majority of the votes cast were for or against the resolution.

At a special meeting of the Board on April 16, the Board voted to recommend to the Society that the referendum of April 2 be declared invalid and the ballots be destroyed without tallying and "that a mail vote be then taken, the results of which, if more than one-half the members voted, be considered a mandate of the Society with respect to the election of physicians to membership without regard to race, creed or color." It was agreed that the tellers who served on April 2 be requested to destroy the ballots in the referendum without their being counted. The Board then specified the manner in which the mail vote should be taken and that ballots must be returned not later than June 16, 1952.

The Society concurred in the Board's recommendations.

June 30, 1952: The Board received a report from the tellers that a count of the mail vote on the controversial resolution revealed that out of 1,380 ballots mailed to Active and Life members, 1,031 had been received by June 16, 1952 and had been counted. Of this number 735 voted "Yes" and 296 voted "No."

The Board directed that a letter be prepared notifying the membership of the results of the balloting and that a communication be forwarded to the Board of Censors reporting the result without comment.

At this time, the 5 applications which had been received from Negro physicians are in the hands of the Board of Censors. The new Board of Censors took office on July 1 and, at the time this is written (mid-July), has not met.

T. W.

THERAPEUTIC NOTES

Gamma Globulin. The Chairman of the Subcommittee on Blood of the Health Resources Advisory Committee has submitted the following observations relating to the use of gamma globulin in the prevention of paralytic poliomyelitis:

"Whether gamma globulin will be effective in the prevention of paralytic poliomyelitis is not now known. On the basis of animal experiments and preliminary study on humans, it is possible that globulin will have value in human poliomyelitis, but serious questions remain to be answered before such a hope can be substantiated. Nevertheless, public dissemination of information on the status and objectives of current studies, incompletely presented or misunderstood, has created a serious demand for gamma globulin which cannot be met.

"Virtually the entire output at current production rates is required to meet the demand for prevention or modification of the course of measles and infectious hepatitis.

"Under the circumstances, it is obvious that the existing limited supply and current production of gamma globulin should be reserved for use in these diseases, in which its efficacy has been established."

This statement has the approval of the Committee on Blood Banks of the American Medical Association.

Chloromycetin. The Food and Drug Administration of the Federal Security Agency will permit the continued distribution of the antibiotic drug chloromycetin under revised labeling that will caution physicians explicitly against its indiscriminate use.

(TO APPEAR AT TOP OF CIRCULAR)

"*Certain blood dyscrasias (aplastic anemia, thrombocytopenic purpura, granulocytopenia and pancytopenia) have been associated with the administration of Chloromycetin. It is essential that adequate blood studies be made when prolonged or intermittent administration of this drug is required. Chloromycetin should not be used indiscriminately or for minor infections.*"

(ON THE LABEL)

"WARNING: *Blood dyscrasias may be associated with intermittent or prolonged use. It is essential that adequate blood studies be made.*"

Dr. Irving Kerlan, Acting Medical Director of F.D.A., said that the recent experience with chloromycetin "is an impressive reminder that highly potent drugs must be treated with extreme care and should not be employed unless there is a clear-cut indication that they are needed."

REHABILITATION DEMONSTRATION PROJECT AT GALLINGER MUNICIPAL HOSPITAL

JOSEPHINE J. BUCHANAN, M.D.

Chief, Department of Physical Medicine and Rehabilitation, Gallinger Municipal Hospital, Washington

Early in the year 1950, it was realized conjointly by the United States Public Health Service (Division of Chronic Disease), the District of Columbia Vocational Rehabilitation Service, and Gallinger Municipal Hospital, through its Chief of Staff, that a total program of rehabilitation within the Hospital and within the community would be a desirable and necessary thing. Since it was also realized that this would be true for every hospital and community within the United States, it was decided that such a program should be conducted as a demonstration, through which approaches to the solution of rehabilitation problems throughout the Nation could be initiated. Some of the problems which called for solution were: (1) the increased occupancy of hospital bed space by patients with long-term illnesses or with the residual disabilities of illness or injury; (2) increased numbers of individuals on community welfare rolls because of disability; (3) the rising costs for these disabled to the hospital and community; (4) loss of manpower in industry because of disability; (5) lack of a medical program which remains responsible for the patient all the way from bed to job.

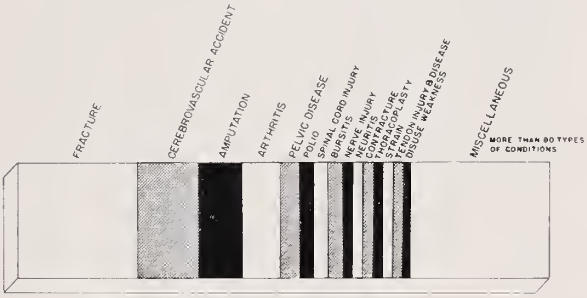
Gallinger Municipal Hospital was chosen as the demonstration site because (1) it was a large general municipal hospital; (2) it had no physical medicine and/or rehabilitation program; (3) all of the above-mentioned problems existed; (4) its Chief of Staff realized the need for such service and was ready to give it his full support and assistance; (5) its location in Washington made for close supervision and observation by the Public Health Service.

The first step in developing this project was the selection of a physiatrist as the chief of the new service of physical medicine and rehabilitation within the hospital and as the coördinator of the hospital and community in the development of a total community rehabilitation program. The chief of this service began active duty at the hospital on September 5, 1950.

The next step in development was that of determining the probable number of patients in the hospital who would be in need of physical medicine or any or all phases of rehabilitation. After a thorough survey at that time it was estimated that approximately 50 per cent of the patients throughout this general hospital could benefit from some form of physical medicine, and that approximately 20 per cent would need some or all of the disciplines of a total rehabilitation program. Since there were some 1,200 beds occupied at that time, it was postulated that some 600 patients could benefit from physical medicine and that some 240 patients needed a partial or total rehabilitation program. The diagnoses of these patients encompassed the entire range of medical knowledge and care. The exact spread of these diagnoses is shown on chart 1. Many other types of disabling conditions will show on the diagnostic list in the future as the service grows sufficiently to allow for the provision of more extensive treatment facilities and personnel.

CHART 1

*First Admissions by Diagnosis, October 1950–December 1951**



* From the Department of Physical Medicine and Rehabilitation, Gallinger Municipal Hospital, in coöperation with Federal Security Agency, Public Health Service

The next and most necessary step in developing this new major service within the hospital was that of education of hospital staff with regard to the treatment potentialities within the field of physical medicine and rehabilitation. As a part of this educational process, a determined effort was made to develop within all medical personnel a philosophy of total rehabilitation within the practice of medicine both in the hospital and in the community. Adequate opportunities for this kind of development of medical knowledge can take place only when the physician responsible for the service is in a status equal to that of all other chiefs of services within the hospital. The adequate continued development of such service can take place only when it is a major service of the hospital, with status equal to that of all other major services of the hospital. Thus, such service must be provided with adequate bed space, adequate treatment space, adequate professionally qualified personnel, an approved residency training program, and opportunities for clinical research. The status of the service and of its chief was adequately established at Gallinger Municipal Hospital at the outset. Additional teaching opportunities were developed through the appointment of the chief of the service as assistant professor of physical medicine and rehabilitation at one of the three medical schools of the community. Much staff time has been spent from the beginning in teaching and exchange of knowledge with all of the hospital staff, including doctors, nurses, social workers, volunteers, etc. Several general staff conferences throughout each year have been devoted entirely to the physical medicine and rehabilitation service, and opportunity has been offered for joint participation with the staff conferences of other services. Various other methods of education and the mutual exchange of ideas were undertaken, such as joint rounds with other services, invitation to other services for joint participation in departmental seminars, demonstration clinics, etc.

From the beginning, much time was devoted to acquainting the community with what could be offered through this service toward the solution of its problems concerning the disabled. This was done through talks to all community agencies concerned with health and welfare, participation on health and welfare planning committees, the formation of a committee on rehabilitation within the United Community Services of the city, consultation service to the local vocational rehabilitation office and to the welfare department of the city through its program of assistance to the totally and permanently disabled, and in many other ways. Many talks were made before numerous groups of civic-minded citizens.

The practical problems in developing such services within the hospital were many and are those to be found almost universally. Some examples of these are the provision of adequate treatment and bed space; the allocation of funds for equipment, staff, maintenance and new construction; and the procurement of the coöperation of the administrative and technical departments of the hospital. These are often very serious problems and may require much time, effort, patience, and persuasive power on the part of the individual responsible for the program. Any one of these problems which offers sufficient resistance to solution can defeat the ultimate success of the entire program.

The actual treatment and service program got under way on November 8, 1950, with a staff composed of 1 chief of service, a physiatrist (PHS), 4 physical therapists (3 PHS, 1 GMH), 1 occupational therapist (Rehab.), 1 clerk stenographer (PHS), 1 vocational counsellor (Rehab.), 1 orderly (GMH), the services of the Social Service Department of the Hospital, and the use as needed of all other service departments within the Hospital. This staff was increased by the end of a year to include 1 additional occupational therapist (Rehab.) and 1 additional orderly (GMH). The second year of operation shows the additional of 2 physical therapists (1 PHS, 1 GMH).

Beginning in the ninth month of operation of the service (July, 1951), all resident physicians on the medical service of the Hospital were assigned to 6 weeks' duty in the Physical Medicine and Rehabilitation service. An intensive clinical teaching program was provided. Clinical and didactic teaching was also provided the junior year medical students of George Washington University.

The initial space was limited to 1 treatment room (35 by 60 feet) and 3 small offices. It required 7 months for the Administrative Division of the Hospital to provide more adequate space. In May, 1951 the service moved into quarters containing about 10,000 square feet of space. This space, however, was a considerable distance from the medical and surgical wards and thus imposed the new problems of transportation, time, and attendant personnel. These problems of space and transportation almost always occur when this kind of service is developed in a hospital which did not provide for it in its architectural planning. In many instances it is better to build additional space than to try to function under the unsolvable limitations.

The problem of funds for the necessary treatment and office equipment was a grave one, since the hospital budget was estimated for two years in advance. Through the untiring efforts of the Hospital Chief of Staff, a transfer of funds was made within the current hospital budget, and $7,000 was allocated for new equipment. In addition, the local Vocational Rehabilitation Service provided $1,000 for the initial occupational therapy equipment. In both the occupational therapy and physical therapy departments, some basic pieces of treatment equipment were purchased, such as diathermy machines, ultra-violet lamps, whirlpool baths, paraffin baths, infra-red lamps, electro-diagnostic and therapeutic apparatus, looms, lathes, hand tools, and others. Aside from these, however, much equipment was hand constructed from plans drawn up by the departmental staff. This equipment included such things as various devices for upper and lower extremity exercises, parallel bars, practice stairs, self-help devices, and numerous others. Some of these were produced by the Hospital, some by the Vocational Rehabilitation Service, and some by the Public Health Service. As the program developed, and its value was increasingly recognized by the Hospital and the community, more and more of the necessary equipment was provided by these three groups.

Also developed was an outdoor functional activities area. Included in this area were a gravel pit, loading platform, garden, obstacle course, and numerous other provisions for heavy activities. In addition an entire bus was provided by the local transit company to be used for the purpose of training the disabled to use public transportation. This latter was considered an extremely valuable asset as the inability of the disabled to use public transportation is very frequently the major deterrent to successful vocational rehabilitation.

During the early months of the operation of these programs, much time was given over to those patients who had been in the Hospital for a long time. These patients were those with diagnoses such as spinal cord lesions producing paraplegia or quadriplegia, arthritis, cerebrovascular accidents with hemiplegia, and others with various diagnoses. Their stay in the Hospital had varied from 818 days in one instance to 90 days or more in the others. The average number of days spent in the Hospital of these long term patients was 366. The only major change in their treatment program was the introduction of physical medicine.

In most hospital situations the patient who has a spinal cord injury can be expected to spend exceedingly long periods of time in the hospital and often becomes a major source of economic concern to the patient, to the hospital, and to the community. One case of this kind can cost many thousands of dollars, and in the absence of physical medicine and rehabilitation service may not be expected ever to leave his bed or wheelchair again. The secondary medical complications of inactivity are well known.

Table 1 shows the time required to ready 6 disabled patients (spinal cord injuries) for discharge and the estimate of financial savings to the Hospital.

TABLE 1

Estimate of Financial Savings to Gallinger Hospital for Six Spinal Cord Injury Patients

PATIENTS	LENGTH OF STAY AT GALLINGER	
	No. days from admittance to Gallinger to start of physical medicine	No. days from start of physical medicine to discharge from physical medicine
H. C.	818	57
G. D.	344	173
R. F.	322	365
A. J.	308	84
W. P.	401	159
A. W.	5	30
Total	2,198 days	868 days
Cost to Gallinger at $13.44 per day per patient	$29,541.12	$11,665.92
Average length of stay	366 days	145 days
Average cost per patient	$4,919	$1,948

The striking contrast is that of the cost to treat and house these 6 patients without physical medicine and the cost with physical medicine: $4,919 per patient without, $1,948 with physical medicine. It is to be remembered that 5 of these were patients whose disabilities (physical and mental) had become well fixed. Thus, on these 6 patients alone it is estimated that the physical medicine and rehabilitation program enabled the Hospital to save $17,875.20 in one year. As the program progressed, and patients with such disabilities were seen immediately upon admission to the Hospital, and their physical medicine and rehabilitation program begun concurrently with other treatment, the time required for their rehabilitation was shortened even more.

During the first 3 months of operation of the physical medicine and rehabilitation service, 278 patients were treated. At that time the average number of days of hospitalization for these patients was 99.5. By the end of 1 year of operation of the service, 883 patients had been treated, and the average number of days of hospitalization had dropped to 27.4. This, once again translated into economic terms, represented a tremendous savings in the medical care costs of these patients and made available many additional beds for others acutely ill and needing hospital care.

The status of the 883 patients who received physical medicine and rehabilitation treatment during the first year's operation of the service was:

	NO.	PER CENT
Totally independent	538	60.9
Partially independent	191	21.6
Treatment interrupted by complications (surgery, disease, etc.)	63	7.1
Remained dependent	72	8.2
Deceased	19	2.2
	883	100.00

The results on these patients have other significant implications. Of the 538 patients who were discharged as totally independent and the 191 who were partially independent, 50 were accepted by the local Vocational Rehabilitation Service for counseling, testing, training, and placement in selected jobs. The majority of these fell into the category of "partially independent." Those who were restored to the status of total physical independence were able in almost every instance to achieve their own vocational rehabilitation without further assistance from Government agencies. Thus was achieved further savings economically and in human dignity and satisfactions. Many of the remaining "partially independents" will be able to achieve a total or partial vocational rehabilitation as budgets and increased knowledge allow vocational rehabilitation programs to expand their services.

TABLE 2

Yearly Progress Report of Department of Physical Medicine and Rehabilitation, Gallinger Hospital

November 8, 1950–October 31, 1951

	PHYSICAL THERAPY	OCCUPATIONAL THERAPY*	TOTAL
Patient Visits	9,505	1,868	11,373
In	7,223	1,403	8,626
Out	2,282	465	2,747
Patients Discharged	777	—	—
In	515	—	—
Out	262	—	—
Average No. Visits Inpatients†	12.0	22.7	17.4
Average No. Visits Outpatients†	6.9	10.3	8.6
Average No. Treatment Hrs. In†	10.7	28.3	19.5
Average No. Treatment Hrs. Out†	5.8	13.7	9.8
Treatments	18,510	1,973	20,483
Work Days	245.5	143	388.5
Therapist Days	995.0	206	1,201
Patients/Day	38.7	13.1	29.3
Treatments/Day	75.4	13.8	52.7
Therapists/Day	4.1	1.4	3.1
Patients/Therapists/Day	9.4	9.4	9.4
Treatments/Therapist/Day	18.4	9.9	17.0
Treatment Hours	8,072.5	2,405.5	10,478.0
Treatment Hours/Day	32.9	16.8	26.9
Treatment Hours/Therapist/Day	8.0	12.0	8.7
Treatments/Patient/Day	1.9	1.1	1.8
Treatment Hours/Patient/Day	0.9	1.3	0.9
Student Days	124.0	—	124.0
Students/Day	8.5	—	8.5

* Occupational therapy was started in April 1951.

† Records were begun for these categories on December 1, 1950.

Orthopedic patients referred to the physical medicine and rehabilitation service represented 42 per cent of the total referrals, or 369. Using data obtained from the Medical Records Library and the Financial Office of the Hospital, a study was made of this group to determine the actual reduction of days spent in the Hospital as a direct result of physical medicine procedures. The years 1949 and 1951 were compared; 1950 represented a mixed year with physical medicine available for only 2 months (November and December). The introduction of the physical medicine and rehabilitation service was the only significant addition to the treatment program of these patients, aside from the gains to be expected from the ever-increasing quality of all medical care. There was no undue pressure for beds in 1951, over and above that of 1949. The findings were as follows: In 1949 the orthopedic patients spent an average of 51.5 days in the Hospital; in 1951, the 505 discharged orthopedic patients spent an average of 33.5 days in the Hospital. If the 505 patients discharged in 1951 had spent the 1949 average of 51.5 days in the Hospital, or a total of 26,007 days the cost would have been $349,540.80 ($13.44 per patient day). Actually, since they averaged only 33.5 days in the hospital, or a total of 16,894 days, the cost of their hospitalization was $227,055.36, and the resulting saving was $122,485.44.

A total survey of the work accomplished throughout this first year is shown in table 2. This gives in detail much of the data which would be of interest to those planning a new service of this kind. Table 3 shows the amounts and kinds of treatment rendered. These have occurred naturally and were not selected on the basis of any personnel or equipment limitations. The spread of referral sources is visualized on chart 2. Chart 3 shows the patient spread according to age groups.

TABLE 3

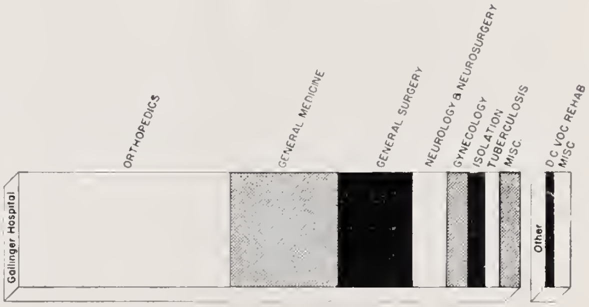
Total Number of Treatments Given in Department of Physical Medicine

November 8, 1950–October 31, 1951

Electrical diagnosis	5
Muscle testing	207
Functional testing	10
Joint range	27
Passive exercises	550
Active assisted exercises	1,498
Muscle re-education	123
Active resistive exercises	4,262
Coördinative exercises	46
Self care	80
Elevation	725
Ambulation	3,210
Stimulation	1,015
Diathermy	1,128
Infra-red	1,222
Paraffin	84
Stretching	2,059
Massage	565
Bandaging	298
Whirlpool	253
Regional ultra-violet	504
General ultra-violet	26
Dressings	386
Total physical therapy treatments	18,273
Occupational therapy treatments, April 1, 1950 through October 31, 1951	1,973
Total number of treatments	20,246

CHART 2

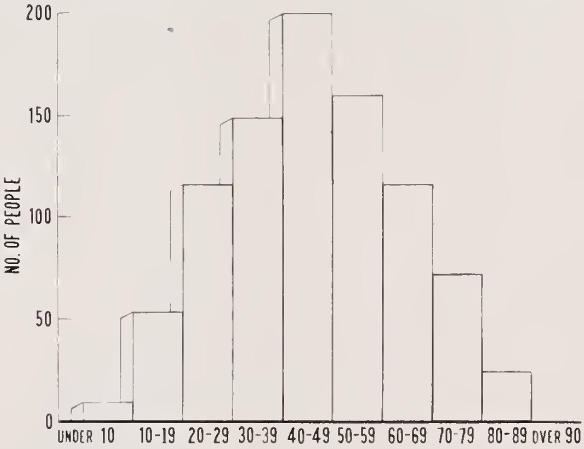
*First Admissions by Source of Referral, October 1950–December 1951**



* From the Department of Physical Medicine and Rehabilitation, Gallinger Municipal Hospital, in coöperation with Federal Security Agency, Public Health Service, and the District of Columbia Vocational Rehabilitation Service

CHART 3

*First Admissions by Age Group, October 1950–December 1951**



* From the Department of Physical Medicine and Rehabilitation, Gallinger Municipal Hospital, in coöperation with Federal Security Agency, Public Health Service

Now if one takes the total amount of money expended to provide physical medicine and rehabilitation services to 883 patients ($58,501), it will be found that the average cost for each patient was

$66.25. If one will also remember that in serving the orthopedic patients alone (369) a saving of $122,485.44 was realized as compared with the $58,501 spent to serve all 883 patients (see table 4), the economics of this investment can readily be appreciated. In addition to this cost-saving to the Hospital must be added the savings to the community in those 583 patients who were returned to society totally independent and able to support themselves, their families and the community (through taxation). If these 583 individuals had remained disabled, they would have cost the community more through (1) longer hospital stay, (2) financial support through welfare, (3) non-payment of taxes. Thus, through an investment of $66.25 per patient, untold amounts of community moneys were saved. Over and above all moneys saved were the savings in human dignity, happiness, and well-being.

TABLE 4

Cost of Establishing and Operating for One Year the Department of Physical Medicine and Rehabilitation

Cost of initial equipment and remodeling in establishing the Department of Physical Medicine and Rehabilitation			$10,500
Cost to Gallinger Municipal Hospital		$9,500	
New equipment	$7,000		
Remodeling building	2,500		
Cost to D. C. Rehabilitation equipment		1,000	
Cost of operating the Department of Physical Medicine and Rehabilitation for the year of 1951			45,523
Cost to Gallinger Municipal Hospital		$17,464	
3 Physical Therapists* (part of year)	$7,587		
2 Orderlies*	5,277		
Material and supplies (estimate)	1,500		
Depreciation, 20% of cost	1,900		
Heat, light, laundry, orderly and janitor service, etc. (estimate)	1,200		
Cost to D. C. Rehabilitation		$10,247	
Depreciation, 20% of cost	$ 200		
2 Occupational Therapists† (part of year)	4,447		
1 Vocational Counselor	5,600		
Cost to U. S. Public Health Service†		$17,812	
1 Medical Officer in Charge	$8,017		
2 Physical Therapists	6,912		
1 Medical Secretary	2,883		
Total Cost			$56,023
Ambulance and Station Wagon			2,478
Grand Total			$58,501

Source of Data:

* Personnel Office, Gallinger Municipal Hospital.

† Personnel Office, U. S. Public Health Service.

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additional current books which, in their opinion, merit comment.

The Unipolar Electrocardiogram; a Clinical Interpretation. Joseph M. Barker, M.D., F.A.C.P., Cardiologist, Yater Clinic; Associate Professor of Clinical Medicine and Special Lecturer in Physiology, Georgetown University School of Medicine; Director of the Heart Station and Visiting Physician, Georgetown University Hospital; Chief of Cardiology, Providence Hospital; Visiting Physician, Gallinger Municipal Hospital; Consulting Cardiologist, Arlington Hospital, Arlington, Va. Assisted by Joseph J. Wallace, M.D., F.A.C.P. Advised by Wallace M. Yater, M.D., F.A.C.P. Foreword by Frank N. Wilson, M.D., F.A.C.P. Price, $12.50. Pp 655, with 458 illustrations. New York: Appleton, 1952.

The Principles and Methods of Physical Diagnosis—Correlation of Physical Signs with Physiologic and Pathologic Changes in Disease. Simon S. Leopold, M.D., Associate Professor of Clinical Medicine, School of Medicine and Graduate School of Medicine, University of Pennsylvania; Director of the Teaching of Physical Diagnosis, School of Medicine; Chief of the Thoracic Clinic, Hospital of the University of Pennsylvania. With a Chapter on "Sounds from The Thorax: Acoustic Principles" by S. Reid Warren, Jr., Sc.D., in E.E., Professor of Electrical Engineering, the Moore School of Electrical Engineering, University of Pennsylvania. Price, $7.50. Pp. 430, with 351 illustrations and 19 color plates. Philadelphia: Saunders, 1952.

Psychiatry and Catholicism. James H. Vanderveldt, O.F.M., Ph.D., Associate Professor of Psychology, The Catholic University of America; Professor of Psychology, Trinity College, and Robert P. Odenwald, M.D., F.A.P.A., Director of the Child Center and Assistant Professor of Psychiatry, The Catholic University of America. Price, $6.00. Pp. 433. New York: McGraw-Hill, 1952.

Concerning Those Who Work with Us

MEDICAL TECHNOLOGY

PROGRESS IN MEDICAL TECHNOLOGY

Anna Fagelson, B.S., M.T. (A.S.C.P.)

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Medical Technology was really born in World War I, became of age in World War II, and with respect to the future, in the language used in 1945 by Dr. Lall G. Montgomery, Chairman of the Board of Registry, "We haven't scratched the surface as yet."

The clinical pathologist was not recognized as a medical specialist until after World War I. It was the standardization program for the hospitals set up by the American College of Surgeons that greatly aided laboratory medicine in achieving recognition.

The American Society of Clinical Pathologists was formed in 1922, and one of the biggest problems facing the new organization was the status of the medical technician. In the early days of laboratory medicine, the pathologist performed the majority of the tests, and the technicians were merely helpers doing the menial tasks in the laboratory. But, as clinical pathology became more complex, the technician assumed greater responsibilities and became a necessary part of the medical scene. The need for well trained medical technicians became more acute, but there was no organization to govern the training and education, nor to evaluate the fitness of individuals to practice. The clinical pathologist, fearing some infringement on his own practice, decided to set up a Board of Registry to control the activities of the medical technician. After making a thorough study of the problem, the A.S.C.P. in 1928 set up the Board of Registry of Laboratory Technicians.

Until 1936 there were two classifications. The majority were designated "laboratory technician," and a few outstanding persons were designated "medical technologist." But this caused some confusion, and when the standards of education and training were elevated, it was decided to have only one classification, that of medical technologist, and the name of the Registry changed to that of Registry of Medical Technologists, as it is known today.

In 1932 about 25 registered laboratory technicians met in Chicago and set about the task of organizing a national society. The present American Society of Medical Technologists was organized under the name of American Society of Clinical Laboratory Technicians in Chicago, Illinois, in June 1933. The name was officially changed in 1936 to coincide with the name of the Registry.

From the 46 charter members at the first convention in Chicago, the A.S.M.T. has grown to 4,974 members as of January 1952. There are now some 48 affiliated state societies which include District of Columbia as well as Hawaii.

Until 1947 the A.S.M.T. conventions were held at the same time and place as the American Medical Association and the American Society of Clinical Pathologists, and speakers were usually physicians and pathologists who were attending those meetings. However, since the A.S.M.T. was growing, it was decided that there would be less conflict and confusion in arranging programs and exhibits and finding suitable accommodations if independent conventions were held.

In 1947 the first independent convention was held in Denver, Colorado, with some 400 members attending the 3-day sessions. The 19th annual convention was held in Swampscott, Massachusetts, June, 1951, with nearly 1,000 persons attending. The conventions were increased from 3 to 5 days in 1949 because of the increase in the number of papers to be presented and the amount of business to be conducted.

Many of the exhibits and papers at the conventions are the work of the medical technologists. The A.S.M.T. and the Board of Registry have through the years encouraged them to do original work on the various aspects of Medical Technology. Many awards are now given at the national conventions for outstanding papers and exhibits. In addition to several awards given by the A.S.M.T., there are the A.S C.P. awards established in 1941, the $200 Hillkowitz Memorial Award in honor of the late Dr. Philip Hillkowitz who did so much for medical technology, and the newly established award for the best paper on parasitology.

In addition to the national convention the various state and district societies hold their own conventions and seminars. Each year the Board of Registry allocates funds for an educational program. These funds are used to defray the expenses of seminars and to buy slides for loan sets to medical technologists.

The research committee of the A.S.M.T. makes available to the medical technologist a consulting service on test procedures and advice and information on recent advances.

Medical technologists can also avail themselves of the refresher training courses offered by the United States Public Health Service at its Communicable Disease center in Chamblee, Georgia. The USPHS offers courses of 1 to 4 weeks in bacteriology, serology, and related subjects.

The seminars and postgraduate courses offered by many local societies and universities help the medical technologists keep abreast of the advances in medicine. "The laboratory should never be static, but should be continually working to improve itself."

The *Technical Bulletin of the Registry of Medical Technologists* has been published since 1930. In January 1951 it was changed from a bi-monthly to a monthly publication. The official publication of the A.S.M.T. is the *American Journal of Medical Technology*, which is published bi-monthly. The 2 publications seem to supplement each other. The *Journal* contains many articles by medical technologists dealing with everyday problems in Medical Technology, and the *Bulletin* publishes articles of a more complex technical nature usually written by persons engaged in research.

Alpha Mu Tau and Alpha Delta Theta are other organizations of registered medical technologists. Alpha Mu Tau was organized in Chicago, Illinois, in 1948, as a fraternity for distinguished medical technologists. Any member of the A.S.M.T. making a worthy contribution to Medical Technology is eligible to membership. The principal purpose is to give scholarships to worthy students in Medical Technology.

Alpha Delta Theta is a national sorority for students in Medical Technology It has about 8 undergraduate chapters as well as several alumnae groups. Undergraduate members must be enrolled in schools offering a bachelor's degree in Medical Technology and have a scholastic average of C or better.

For a number of years the A.S.M.T. had worked and hoped for representation on the Board of Registry. There had been an Advisory Committee to the Board, but its members did not have full voting power. In 1950 the Board of Registry of Medical Technologists was increased from 6 to 9 members with 3 members representing the A.S.M.T. The medical technologists can now play a more active role in the governing of their profession. The A.S.M.T. and the Board of Registry are now working hand in hand. The A.S.M.T. has assumed many of the problems which heretofore burdened the Board of Registry.

Vocational guidance and recruitment have long been of great concern to the Registry. The A.S.M.T. is now doing much work in these fields as well as in public relations. Plans are being made for the hiring of a professional public relations counsellor in the near future. Why is a public relations counsellor necessary? Simply because Medical Technology is perhaps one of the least known, least understood, and least recognized professions today.

"The one and only way to train students adequately and properly is in Schools of Medical Technology approved by the Council on Medical Education and Hospitals of the American Medical Association." Yes, there are other ways of training technicians. You can teach a person to do routine blood counts and urinalysis, but will that person recognize atypical manifestations? Will he realize how important accuracy and integrity are in this work?

The need for qualified medical technologists is growing with every new advancement in medicine, but unfortunately the demand has far exceeded the supply. The Board of Registry recently established a Laboratory Aide program in order that persons without a college background could be properly trained for the more routine procedures. This may alleviate the shortage somewhat and may help to control the practice of the technician without college training. However, if true progress is to be made in the field of laboratory medicine, the standards for medical technologists should be maintained and perhaps eventually elevated.

Many technicians are specializing in one phase of medical technology. When one considers the many fields that concern the medical technologist, and the fact that these have grown more complex, one can readily see the need for highly trained, specialized medical technologists.

Unfortunately, the medical technologist has no Florence Nightingale to guide her. The Board of Registry and the A.S.M.T. have done wondrously well considering the obstacles and pitfalls in the tremendous task of establishing a new profession. We need much help and coöperation from physicians, hospitals, clinics, etc., if medical technology is to be a recognized and respected profession. Many persons who would be well qualified for Medical Technology go into other fields because they see the average medical technologist working long hours for low wages in poorly equipped laboratories. The lot of the medical technologist has improved, but it was only recently that many laboratories were taken out of some small dark room and given more space to function efficiently.

An organization of medical technicians, The American Medical Technologists, is in no way affiliated with the Board of Registry of Medical Technologists or the A.S.M.T. This organization acts as its own qualifying body and has much lower standards than the Registry and designates its members as Medical Technologists (M.T.). For this reason, in 1941, the Board of Registry somewhat changed its registration insignia to that of M.T. (A.S.C.P.). The A.M.T. and its affiliated organization, the American College of Medical Technologists, advocate state licensure for all medical technologists and have attempted to enact a bill so designed that all technicians and pathologists would be under their control. Under this bill, if medical technicians secured a state license they would be free to operate a laboratory without the supervision of a physician or pathologist. The pathologist would likewise be unable to have a laboratory unless he had the approval of the state board. Thanks to the united efforts of the medical technologists (A.S.C.P.), physicians and pathologists, this bill has not as yet been passed by the various state legislatures.

The American Society of Medical Technologists drew up a "model bill" in 1949, merely as a measure of self-defense, to be used only if necessary to counter any unjust legislation. The A.S.M.T., however, has never stated that it is definitely for or against state licensure.

The Chairman of the Committee on Legislation in 1949 stated, "The judment of the necessity of licensure in any state must be made by the technologists and pathologists in that state. . . . There are sound arguments on both sides of the question. . . . It's a matter to be considered seriously and weighed carefully."

The Civil Service-Armed Services Committee is a joint committee of the A.S.M.T. and the A.S.C.P. It has been very active for a number of years attempting to secure recognition and better positions for medical technologists (A.S.C.P.).

A bill, which was not passed, was introduced into Congress during World War II that would have given medical technologists commissions in the armed services. Nevertheless, about 1950 the armed services began giving commissions to medical technologists if they held a bachelor's degree, had some experience, and were certified by the Board of Registry of Medical Technologists.

The joint committee has worked tirelessly in its efforts to raise the classification ratings of medical technologists employed by the Federal Government. Unfortunately, we note little improvement, since the Civil Service Commission is still considering the Committee's proposals.

From the 1950 report on the Civil Service Ratings, the Chairman reported, "At the present time Civil Service recognizes graduates of the AMA-approved schools for medical technology, and allows such qualified persons to enter the service as a GS-5. Nurses, physical therapists, and other auxiliary medical personnel enter the Federal service at the same grade level, and may be classified as high as a GS-12. The highest grade given to medical technologists is GS-7. Therefore, our present request is for 2 series, 1 for medical technicians (laboratory aides?) with GS-2 through GS-5 and 1 for medical technologists, series GS-5 through GS-11."

The Civil Service-Armed Services Committee conducted a survey in 1950–51 in order to ascertain the distribution and ratings of medical technologists (A.S.C.P.) employed under Civil Service.

About 4 per cent active medical technologists (A.S.C.P.) are employed by the Federal Government in a number of different departments and bureaus: Veterans Administration Hospitals and Regional Clinics, 57 per cent; Army, 18 per cent; Public Health, 8 per cent; Marine Hospitals, 5 per cent; Air Force, 3 per cent; Navy, 2 per cent; Indian Service, 0.8 per cent, and so on.

The most startling fact disclosed in this survey is the low ratings of persons with as much as 20 to 30 years of service. These people have grades of only GS-5, 6 or 7, which certainly does not compare favorably with those in other fields of endeavor with a like amount of education and experience.

However, looking at the situation from another point of view, although the medical technologist ratings under Civil Service are much lower than they should be, they have some advantages that many technicians do not have. They usually have better hours, better working conditions; vacation and sick leave are much more liberal than in most hospitals and clinics; and last but not least, there is a retirement plan.

Since 1928 there have been 21,010 medical technologists registered with the Board of Registry (A.S.C.P.). The total number of registrants at the present time is 17,631, and of this number 18 to 20 per cent are not actively engaged in the field of medical technology. Naturally, most technicians are employed in the more populated areas where there are adequate laboratory facilites. Within the metropolitan area of Washington, D.C. there are approximately 275 registered medical technologists.

Unfortunately, some 40 per cent of the counties of this country do not have adequate hospital facilities for diagnosis and care of their inhabitants in case of illness. Many small communities that do have hospitals not only have difficulty in securing physicians, but all medical personnel. We recently noted an advertisement for a medical technologist to work in a small hospital in Tennessee. The hospital was not only offering a good salary, good hours and good living conditions, but it was also added that there was good hunting and fishing in the vicinity. (It was quite a temptation, but we did not apply for the position.)

The Board of Registry did not give examinations to all candidates for certification until 1933. The number of persons registered by examination each year has grown from 287 in 1934 to 1,893 in 1951. Some 90 to 95 per cent of the registered medical technologists are women, but in the past few years the number of men taking the examinations has been increasing. In 1947 only 4 per cent of the newly registered technologists were men, whereas the number of men certified in the spring of 1951 totaled 14 per cent.

Our previous discussion of poor salaries and little recognition makes it quite obvious why more men have not entered the field of Medical Technology, yet men are usually paid better salaries than women, and hold the more responsible positions. One of the biggest problems in keeping laboratories adequately staffed is that so many women marry and retire. Thus, male technologists are preferred when available.

Looking at the progress in Medical Technology from the technical point of view, one becomes quite overwhelmed with the magnitude of the research and development that has resulted in the modern clinical laboratory. We could no doubt fill several books merely with the background of each procedure that is performed in the laboratory today. Since 1897, when Dr. Frederic E. Sondern opened the first clinical laboratory in this country in New York City, the scope of laboratory medicine has grown from a few tests to hundreds of procedures that are performed on every system of the human body and many environmental agents that affect it.

The laboratory examinations of 50 years ago consisted mainly of blood counts, urinalysis, Wassermann tests, and a limited amount of bacteriology and parasitology. There were few postmortems done or histologic examinations made outside of the pathology departments of the medical schools. Biochemistry was still a dream of those engaged in research.

In the modern hospital the demands on the laboratory have grown to such an extent that it has necessitated the division of laboratory services into various departments, each with 1 or more technologists.

We believe that "The Code by Which I Practice Medical Technology" by Rose Matthaei, Editor of the *American Journal of Medical Technology*, best expresses the ideals of the medical technologist:

(*Continued on page 523*)

MEDICAL CARE PREPAYMENT PLAN APPROVED

An experimental program to provide benefits for medical care to subscribers hospitalized in nonsurgical cases, authorized by the Board of Trustees of Medical Service of the District of Columbia, was approved in principle by a voice vote of Participating and Coöperating Physicians at a special meeting on July 29. The new program will be placed in operation as soon as the necessary arrangements can be completed. This is the second major step Medical Service has taken this year to provide the Washington area with a well-rounded program for prepayment of professional services rendered by physicians. The other was the introduction of an experimental Home and Office Care program last March.

During the experimental period, medical care benefits will be offered to no more than 5 per cent of the Medical Service enrollment, which now totals 354,000 persons in the Washington area. From the experience thus gained, Medical Service expects to obtain actuarial data on incidence and other factors that will enable the Plan to determine the cost of providing medical care benefits for the entire subscription body. Results of the experiment will be carefully analyzed by a special Committee on Medical Care composed of Dr. Maurice A. Selinger, Chairman, and Drs. G. Halsey Hunt, Henry L. Darner, Herbert S. Gates, Theodore J. Abernethy, and Richard H. Todd.

Dr. Donald Stubbs, President of Medical Service, has stated that approval of a fee for the management of medical care patients will be sought from Participating Physicians by a mail vote in accordance with the Plan's by-laws. The fee will be applicable beginning with the fourth day of hospitalization and ending with the twenty-first day of hospitalization for any one period of disability. Benefits for laboratory and X-ray procedures will be available from the first day of hospitalization through the twenty-first day of hospitalization and will be paid at the rate prescribed in the Schedule of Fees now in effect. The program does not contemplate payment for consultation, additional visits in any one day during the period of coverage, or when the patient is hospitalized primarily for diagnostic purposes.

The medical care benefit will not preclude the physician's right to charge the patient directly for medical treatment during the first three days of the patient's hospitalization, and will apply as payment in full only for subscribers who are under the income ceilings of $3,000 for the individual and $5,500 for family participants.

"The development of a medical care prepayment program is one of the original objectives of Medical Service," Dr. Stubbs said. "Such a program has been studied at great length since Medical Service was established. The Plan is now in a position to undertake the project on an experimental basis for the purpose of obtaining the information we need to proceed with the development of a program for the public at large.

"The experimental medical care program is only a beginning. It will be expanded as soon as circumstances permit. It is significant for the future of Medical Service that this program, together with the Home and Office Care Program which was begun last March, offers an opportunity for many physicians who heretofore have not participated in the activities of Medical Service to join in the development of a well-rounded program, conceived and directed by physicians, to provide the public with a means of prepaying its medical expense.

"I hope all physicians in active practice will avail themselves of this opportunity to render an important service to their patients, to their prepayment plan, and to their community and the medical profession."

Medical Technology—Fagelson (*Continued from page 522*)

"As a medical technologist, I am independent, with a coöperative spirit in working with my fellows in the medical profession. I do not want to encroach upon anyone else's premises.

"May I look upon my profession with the respect it merits, and so win the respect of those in related professions and the laity alike."

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(*Continued on page 530*)

News and Personals

The 80th Annual Meeting of the American Public Health Association and the annual meetings of 38 related organizations will be held in the Public Auditorium, Cleveland, Ohio, October 20–24. More than 5,000 professional public health workers from all parts of the free world will attend.

The Lasker Awards for 1952 for outstanding contributions in medical research and public health administration will be presented on Tuesday evening, October 21. The Sedgwick Memorial Medal, given for distinguished service in public health, will be awarded at the banquet session on Thursday evening, October 23.

Requests for detailed information on these meetings may be addressed to the Association at 1790 Broadway, New York, N. Y.

The National Gastroenterological Association will hold its 17th Annual Convention and Scientific Sessions at the Hotel Statler in New York City, October 20, 21 and 22.

Immediately following the Convention, October 23–25, the Association will conduct its **Fourth Annual Course in Postgraduate Gastroenterology** at the Hotel Statler. As in past years, the course will be under the direction and co-chairmanship of Dr. Owen H. Wangensteen, Professor of Surgery of the University of Minnesota School of Medicine, who will serve as surgical coördinator; Dr. I. Snapper, Director of Medical Education of Mt. Sinai Hospital, New York City, will serve as medical coördinator. One complete session will be devoted to a Clinical Pathological Conference at the Mt. Sinai Hospital. For further information and enrollment write to the Association, Department GSJ, 1819 Broadway, New York 23, N. Y.

The Third Annual Medico-Military Symposium for all armed forces of the United States will be held at the U. S. Naval Hospital in Philadelphia, October 20–25. Arrangements are being made to give both promotion and retirement point credits for those in attendance, including Army, Air Force and Navy Reserve officers. Communications should be addressed to District Medical Officer, Building No. 4, U. S. Naval Base, Philadelphia 12, Pa.

The George Washington University School of Medicine is offering a **part-time postgraduate program,** beginning in October, which is designed for practicing physicians in the Metropolitan Washington Area. The course will be known as "The Practical Application of the Basic Sciences in Internal Medicine" and should be of real significance for the internist and general practitioner, and for physicians who plan to take the examinations of the American Board of Internal Medicine. Pathological physiology and the mechanisms of disease will be stressed together with underlying principles of diagnosis and treatment.

The course will be offered on Thursday evenings, beginning October 9, 1952, and extending through February 12, 1953. Classes will be held in the Conference Room of the University Hospital from 8 to 10 p.m. Fee for the course will be $50. Inquiries may be addressed to Dr. Thomas M. Peery, Director of Postgraduate Instruction, George Washington University Hospital.

The Annual Meeting of the Eastern Section of the American Trudeau Society will be held, October 31 and November 1, in Philadelphia, with headquarters at the Bellevue-Stratford Hotel. Members of the Society wishing to present papers are urged to communicate promptly with the Chairman of the Program Committee, Dr. Katharine R. Boucot, 311 Juniper Street, Philadelphia.

The 25th Graduate Fortnight of the New York Academy of Medicine is scheduled for October 6 to 17, 1952. The topic for this meeting is "Hormones in Health and Disease." The morning panel meetings and the evening sessions will be held at the Academy, 2 East 103rd Street. Hospital clinics will be held in the afternoons at local institutions. The registration fee for non-Fellows of the Academy is $10.00.

Training courses for Volunteer Naval Reserve Medical, Medical Service and Hospital Corps officers in malariology and insect control will convene at the Navy Malariology and Mosquito Control Unit, Naval Air Station, Jacksonville, Florida, on the first and third Wednesday of October, November and December, 1952. Each course of instruction will continue for two weeks.

The courses will provide information on current technics to be employed in insect control and practical field experience which is not readily available to those officers in their civilian occupation yet is invaluable to their function in the event of mobilization.

Inactive Volunteer Reserve officers are encouraged to take advantage of the opportunity to attend these courses on active training duty orders in a pay status.

Quotas to attend these courses have been allotted to the Commandants of the 1st, 3rd, 4th, 6th and 9th Naval Districts and the Potomac River Naval Command. Eligible officers who desire to attend these courses should, at the earliest practicable date, submit requests to the Commandant of their home Naval district.

Meals and sleeping quarters will be available at the Bachelor Officers' Quarters for those officers desiring such accommodations.

The American Dermatological Association will award a **prize of $300** for the best essay submitted for original work, not previously published, relating to some fundamental aspect of dermatology or syphilology.

Manuscripts should be typed in English, double spaced, and forwarded, together with illustrations, charts and tables, all of which must be in triplicate, to Dr. Louis A. Brunsting, Secretary of the Association, 102–110 Second Avenue, Southwest, Rochester, Minn., not later than January 1, 1953. Competition in this contest is open to scientists generally, not necessarily to physicians.

The prize-winning candidate may be invited to present his paper before the annual meeting of the Association, with expenses paid, in addition to the $300 prize. The next annual meeting is scheduled to be held at the Lake Placid Club, Essex County, New York, June 9–13, 1953. Further information regarding the contest may be obtained by writing to the Secretary of the Association.

The American Goiter Association again offers the **Van Meter Prize Award** of $300 and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The Award will be made at the annual meeting of the Association, which will be held in Chicago, May 7, 8 and 9, 1953. A place will also be reserved on the program of the annual meeting for the presentation of the Prize Award Essay by the author, if it is possible for him to attend. The essay will be published in the annual *Proceedings* of the Association.

The competing essays may cover either clinical or research investigations; should be presented in English, not exceeding 3,000 words in length; and a typewritten, double-spaced copy in duplicate sent to the Corresponding Secretary, Dr. George C. Shivers, 100 East Saint Vrain Street, Colorado Springs, Colo., not later than February 15, 1953.

The Trustees of the Caleb Fiske Fund of the Rhode Island Medical Society announce the following subject for the **prize dissertation of 1952**: "The Present Status of Anticoagulant Therapy." An award of $200 is offered for the best dissertation submitted. The successful author must agree to read his paper before the Rhode Island Medical Society at its annual meeting on May 7, 1953.

Papers should be submitted by December 1, 1952, with a motto thereon, together with a sealed envelope bearing the same motto inscribed on the outside and the name and address of the author within. Manuscripts must be typewritten, double spaced, and should not exceed 10,000 words. For further information, write to the Rhode Island Medical Society, 106 Francis Street, Providence 3, R. I.

The Arthritis and Rheumatism Foundation is offering to qualified individuals research fellowships in the basic sciences related to arthritis. Fellowships will be granted on both the predoctoral and postdoctoral levels, and will run for one year with prospect of renewal.

The predoctoral fellowships range from $1,500 to $3,000 per annum depending on the family responsibility of the fellow, and the postdoctoral fellowships, from $3,000 to $6,000, on the same basis. For information and application forms address the Medical Director of the Foundation, 23 West 45th Street, New York 36, N. Y. Applications should be in the hands of the Medical Director by November 1, 1952. Applications will be reviewed and awards made by February 15, 1953.

New research applications in the cardiovascular and related fields are now being accepted by the **American Heart Association** for studies to be conducted during the year beginning July 1953.

Research Fellowships are available to graduates of approved medical and graduate schools who are interested in research and who plan to follow an academic career. Established Investigatorships are open to individuals of proven ability who have degrees in medicine, philosophy, science or the equivalent, and who are interested in a career of research. Grants-in-aid are available to nonprofit institutions for a specified program of research including work in the basic sciences, under the direction of an experienced investigator.

Applications for Research Fellowships and Established Investigatorships should be submitted by September 15, 1952, and for Research Grants-in-aid, up to December 1, 1952. Information and forms may be obtained from the Medical Director, A.H.A., 1775 Broadway, New York 19, N. Y.

The stipends for fellows and investigators were recently increased. Under the new scale, Research Fellowships, which are granted for a one-year period, range from $3,500 to $5,500. Established Investigatorships, which may be extended annually for a five-year period, range from $6,000 to $9,000. Grants-in-aid are awarded in varying amounts, usually not exceeding $10,000, and the period covered is variable, depending upon the particular program of study.

The Executive Board of the Medical Society of the District of Columbia, at its meeting, July 28, approved the recommendation of Dr. Alfred A. J. Den, Chairman of the Committee on Scientific Exhibit for the 23rd ANNUAL SCIENTIFIC ASSEMBLY, that awards in the form of certificates be given to exhibitors whose displays are outstanding, and that these awards be made a permanent feature of subsequent ASSEMBLIES.

Research grants from the U. S. Public Health Service and other Federal departments are enabling the continuation of special research projects in Washington medical institutions.

Georgetown University School of Medicine has received a continuation grant of $25,000 from the Public Health Service to support training in cancer diagnosis and treatment under the direction of Dr. Murray M. Copeland, Professor of Oncology.

Gallinger Municipal Hospital has been awarded $24,300 from PHS funds for studies on the aging processes in the human brain. These studies are being conducted by Dr. Joseph F. Fazekas, Chief of Staff, Dr. Nicholas J. Cotsonas, Chief Medical Officer, Dr. Ralph W. Alman, Chief Medical Officer of the Outpatient Department, and Dr. Alice N. Bessman, Fellow in Medicine of the George Washington University Medical Division. This award, a two-year grant, was approved recently by the National Heart Institute.

George Washington University School of Medicine has received two sizable grants from the Public Health Service: $11,005, for continued research on the restoration of blood vessels which have been injured by disease or a wound, and $10,249 for research in reconstruction of the aortic arch through surgery and the use of grafts or synthetic materials. These projects are being developed under the guidance of Dr. Brian Blades, Professor of Surgery, with the assistance of Dr. Howard Pierpont, Director of the Surgical Research Laboratory. Dr. William S. McCune, Associate Clinical Professor of Surgery, is assisting in the investigation on restoration of injured blood vessels.

Dr. Blades and Dr. Pierpont are also making studies of liver circulation, assisted by a grant of $9,239 from the Veterans Administration.

The office of the Surgeon General of the Army has contributed $6,606 to permit these doctors to make studies on factors of safety in intra-arterial-transfusions.

Dr. Tiffany Lawyer, Jr., Associate in Neurology at Columbia University, has been appointed Chief of the Neurology Section of the Psychiatry and Neurology Division, Veterans Administration Department of Medicine and Surgery, succeeding Dr. Pearce Bailey, who resigned recently to accept a position as Director of the Institute of Neurological Diseases and Blindness of the U. S. Public Health Service.

Dr. Lawyer received his degree in medicine from Albany (N. Y.) Medical College in 1942. He served as a medical officer with the Navy during World War II, from 1943 to 1946. He spent the next three years at the Albany (N. Y.) Hospital. In 1949 he joined the staff of Montefiore Hospital in the Bronx, New York, as a neurologist and has continued in that position until his VA appointment. The same year he was appointed Instructor in Neurology at Columbia University.

He is a diplomate of the American Board of Psychiatry and Neurology, and a member of the American Medical Association, the American Psychiatric Association, and the American Academy of Neurology.

Dr. Walter Freeman, Professor of Neurology at George Washington University School of Medicine, performed or supervised about 200 transorbital lobotomy operations at four state mental hospitals in West Virginia between July 18 and August 7.

Drs. Edgar W. Davis, Bernard J. Walsh and Sol Katz presented the Sunday afternoon program, June 29, during the 75th Anniversary Meeting of the Harrison County Medical Society in Clarksburg, West Virginia. The three-day meeting was held in the Stonewall Jackson Hotel, beginning June 28.

Dr. Davis, Professor of Thoracic Surgery at Georgetown University School of Medicine, was moderator for the program, which concerned "Diseases of the Thorax." Ably assisting him in the presentation of the subject were Dr. Walsh, Associate Clinical Professor of Medicine at Georgetown, and Dr. Katz, Adjunct Clinical Professor of Medicine at both Georgetown and George Washington University Schools of Medicine.

Dr. Joseph H. Cowan, an Active member of the District Medical Society, was aboard the Navy transport *General A. W. Greely* when it rescued passengers and crewmen from the American freighter, *Flying Enterprise*, which sank several days later after it had been towed to a point near the English coast. At the time Dr. Cowan was supervising the medical care of a shipload of displaced persons being sent to this country under the auspices of the International Refugee Organization. All personnel of the transport received copies of a letter of commendation from Rear Admiral J. M. Will, Commander, Military Sea Transportation Service, Atlantic Area, praising the eagerness of all aboard the *Greely* to assist in the rescue of 36 passengers and crewmen from the *Flying Enterprise*, which was skippered by the now famous Captain Kurt Carlsen.

Two members of the District Medical Society appeared on the program of the 17th Annual Assembly of the United States and Canadian Chapters of the International College of Surgeons in Chicago, September 2–5. **Dr. William C. Meloy,** Associate in Surgery and Chief of Plastic Surgery, George Washington University School of Medicine, addressed the Plastic Surgery Section, September 2, on "Reconstructive Repair of Trophic Ulcers." **Dr. Lloyd G. Lewis,** Professor of Urology, Georgetown University School of Medicine, spoke on "Radium and X-ray Limitation in Bladder Tumors" before the Urology Section. The meetings were held in the Conrad Hilton Hotel.

Dr. Winfred Overholser addressed the dinner meeting of the Fifth Annual Conference on Aging at the University of Michigan, Ann Arbor, July 24.

The AMA's first Medical Public Relations Institute was held at the Edgewater Beach Hotel, Chicago, September 4 and 5. **Theodore Wiprud,** Secretary of the District Medical Society, participated in a panel discussion on "Practical Ways to Encourage Physician Participation in Society Activities."

Dr. Monroe J. Romansky, Associate Professor of Medicine, George Washington University School of Medicine, addressed the Maine Chapter of the American College of Physicians at Belgrade Lakes, Maine, June 25. He spoke on "Current Trends in the Use of Antibiotics."

Dr. Romansky was in St. Petersburg, Florida, April 1 and 2, where he attended the Veneral Disease Control Seminar of the Division of Venereal Disease (Public Health Department). He addressed physicians attending the Seminar on the subject, "Is There Any Indication that Penicillin Is Losing Its Effectiveness?"

MERRITTE WEBER IRELAND, M.D., LL.D., F.A.C.P., F.A.C.S.
(1867–1952)

Major General Merritte W. Ireland, who was Surgeon General of the United States Army from 1918 to 1931, died, July 5, 1952, at Walter Reed Army Hospital after a long illness. His death brought to a close a long and distinguished career in the Army Medical Service.

While General Ireland was Surgeon General, the Army Medical Center, which brought together on the grounds of Walter Reed Hospital all of the Army's medical schools, was created. Among many other advances in the Army's medical program during his term of service was the reorganization of the Surgeon General's office to utilize the experience gained during World War I.

General Ireland was born in Columbia City, Indiana, May 31, 1867. He received his first degree in medicine from Detroit College of Medicine in 1890 and a second similar degree from Jefferson Medical College, Philadelphia, the following year. He was commissioned an Assistant Surgeon in the Army in 1891.

He was a pioneer medical officer at Army outposts in the Far West, Southwest and Northwest and in Cuba and the Philippines. He was post surgeon at Fort Sam Houston when General Pershing led the American expedition into Mexico. From Fort Sam Houston he went to France; he was promoted to Major General in 1918 and made Chief Surgeon General of the American Expeditionary Force under General Pershing. When President Woodrow Wilson appointed him Surgeon General of the Army in October, 1918, he returned to the United States. He was reappointed by President Warren Harding in 1922, by President Calvin Coolidge in 1926, and by President Herbert Hoover in 1930. He retired May 31, 1931.

General Ireland was the recipient of many honors. He held honorary degrees from Jefferson Medical College, University of Michigan, Gettysburg College, International Y.M.C.A. College, Syracuse University and Wayne University. Among the awards he had received were the Distinguished Service Medal of the United States, Companion of the Order of the Bath of Great Britain, Commandeur of the Legion d'Honneur and Medaille des Epidemies of France, and the William Freeman Snow Award for Distinguished Service to Humanity from the American Social Hygiene Association.

He was elected to Honorary membership in the Medical Society of the District of Columbia in 1929. In 1945 the Society held a reception in his honor and presented him with a citation.

His list of professional and membership affiliations was a long one. He served on the National Board of Medical Examiners of the United States, the Central Committee of the American Red Cross, and the Federal Board of Hospitalization. He was a member of the American Medical Association and served on its Committee on Medical Education and Hospitals. He was a Fellow of the American College of Physicians, Fellow and Past President of the American College of Surgeons, a Fellow of the Royal College of Surgeons (Edinburgh), a member of the Association of Military Surgeons of the United States Past Secretary of the Gorgas Memorial Institute of Tropical Medicine, and a member of the Board of Directors of both the American Social Hygiene Association and the District of Columbia Social Hygiene Society.

He is survived by his wife, Mrs. Elizabeth Liggett Ireland, residing at their home, 1870 Wyoming Avenue, N.W., and a son, Dr. Paul Mills Ireland, who is Chief Surgeon of the Veterans Administration Hospital in Denver, Colorado.

WALTER HIBBARD MERRILL, L.B.,M. D.
(1873–1952)

Dr. Walter H. Merrill, a pioneer in the development of radiography, died, July 23, 1952, at his home, 3500 14th Street, N.W. Dr. Merrill, who had been in charge of the X-ray section at Glenn Dale Sanatorium, retired from the Health Department early in 1949, at the age of 75 years.

Dr. Merrill was born in Marlborough, New Hampshire, February 17, 1873. He graduated from Dartmouth College, receiving the degree Bachelor of Letters, in 1894. He received his medical education at Columbian (now George Washington) University, and his degree in 1901.

Following the discovery of Roentgen rays in 1895, their development as a medical tool came through experiments and usage early in the twentieth century. Dr. Merrill, starting his medical career in this period, became one of the early leaders in this branch of medicine.

Dr. Merrill affiliated with the District Health Department in 1918, first as a part-time physician at clinics and the Upshur Street Tuberculosis Hospital. When the Upshur Street Hospital was moved to Glenn Dale in 1937, he became a full-time physician in charge of the X-ray section. He was granted five extensions after reaching the normal retiring age. For many years he was also associated with the X-ray Department of Garfield Memorial Hospital.

He was elected to membership in the Medical Association of the District of Columbia in 1902 and in the Medical Society in 1904. He became a Life member of the Society in 1943. He was a member of the American Medical Association. His main interest beyond the practice of his specialty was the local Boy Scout organization.

Dr. Merrill leaves a brother, Josiah Leverett Merrill, of Port Washington, Long Island, N. Y., and four sisters: Miss Margaret Bell Merrill and Mrs. A. G. Sprague, both of St. Johnsbury, Vermont; Mrs. A. E. Howard, of Hartford, Conn.; and Mrs. Joseph Fairbanks, of 3319 Newark Street, N.W., Washington, D. C.

GREGG CUSTIS BIRDSALL, B.S., M.D.
(1883–1952)

Dr. Gregg Custis Birdsall, who had practiced in Washington for 43 years, died, July 16, 1952, at Doctors Hospital after an illness of five months. He had retired from practice in 1947, when he moved away to live at his summer home in Milford, Penna. His Washington home and office were located at 1832 Kalorama Road, N.W.

Dr. Birdsall was born in Patterson, New York, January 17, 1883, the son of Dr. Thomas P. Birdsall and Mrs. Cynthia Green Birdsall. He was named for the late Dr. J. B. Gregg Custis, Sr., a friend of the family, with whom he began his practice as an assistant when he first came to Washington in 1904. He was educated in the public schools of New York State and graduated from the New York Medical College in 1904.

Dr. Birdsall was on the staff of the National Homeopathic Hospital for many years. He was Secretary of the District Board of Examiners in Medicine and Osteopathy from 1929 through 1947. He was a charter member of the Columbia Clinical Club, and a member of the American Institute of Homeopathy, the Chiron Club, and the International Medical Society. He was an Active member of the Medical Society of the District of Columbia from 1930 until he resigned in 1950.

He had served on the Advisory Board for the branches of Riggs National Bank, and was a member of the Chevy Chase Club.

He is survived by his wife, Mrs. Isabelle Patterson Birdsall; a son, Gregg Birdsall, Jr., of New York; a daughter, Mrs. Jerome Howell, 14 Westmoreland Hills, Md.; and three brothers, Walter and Rollin Birdsall, of Millbridge, Me., and Lewis Birdsall, of Chicago.

JOHN PAUL GUNION, M.D.
(1876–1952)

Dr. John Paul Gunion, a general practitioner in the Washington area for almost 50 years, died, July 23, 1952, at the Washington County Hospital in Hagerstown, Md., after a brief illness. He became ill while vacationing at Blue Ridge Summit, Penna.

Dr. Gunion was born, September 26, 1876, in Washington, D.C. He graduated from old Central High School and received his degree in medicine from Columbian (now George Washington) University in 1899. He was licensed to practice in the District of Columbia the same year and practiced continuously until he retired in 1947.

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During his long practice Dr. Gunion had served in several different capacities, as physician with the Board of Charities of the District of Columbia, with the United States Public Health Service, and as a medical officer at Mount Alto Hospital from 1933 to 1946.

He became an Active member of the District of Columbia Medical Society in 1902 and resigned in 1938.

He is survived by his wife, Mrs. Mae Gunion, of 716 West Montgomery Avenue, Rockville, Md.; a son, John Bowman Gunion, 3403 Macomb Street, N.W.; a daughter, Mrs. Evelyn G. Godsall of Wrightsville, Penna.; and a twin sister, Mrs. Ada G. Broecker, of Columbia, Penna.

Marital Conflict—Steiner

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deep psychoanalytic treatment is indicated.

Should the best efforts of our patient be futile, she will find the strength and select the proper time to seek a divorce. It is never our function to make major life decisions for the patient. We must give support, encouragement and properly timed, useful insights. This will help the patient solve her own problems.

CONCLUSION

The basic reason for this type of conflict is that people often expect fulfillment of personal needs in a marriage. One who anticipates achieving happiness from marriage seldom sees the partner as he really is. The great dissillusionment comes when the mate fails to create the utopia dreamed of. The preoccupation of our patient with her own needs prevents recognition of an emotional illness in her husband. The patient's interpretation of the husband's withdrawn attitude as rejection causes her to go into a neurosis.

This type of marital incompatibility may produce a variety of clinical pictures. Awareness of its etiologic importance provides the general practitioner an opportunity to effect a healing before divorce or mental illness has rendered the pathology irreversible.

Paranoid Psychosis—Salzman

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be shown" differently even though he makes it virtually impossible to do so. The instilling of doubt into the paranoid structure is the main focus of all contacts with paranoids, and this can most easily be done early in the acute phase by building up a good relationship with the patient. Later in treatment it is done with greater difficulty. Sullivan has said: "When the patient works through one parataxic distortion, there is the possibility of favorable outcome." I believe that, until one can instill some questioning doubt about the paranoid structure, therapy has not begun. It is the introduction of this doubt that permits these patients to wonder about their need to distrust everyone and allows them to have some tentative trust in the therapist.

We are all familiar with the short, transitory paranoid episodes which were very prevalent in the armed forces. They resolved rather quickly and left only a suspicious, cautious, cynical understructure which we called a paranoid personality. In these instances it is very likely that the delusions were abandoned when the acute situation was dealt with, without confirmatory experiences, and left an individual peculiarly sensitive to further paranoid outbreaks. As with all massive attempts to reformulate personality, there is a variable period of uncertainty about the new solution before any fixation occurs. This is the crucial period for therapeutically influencing the patient. Later on it becomes much more difficult. This may help us to understand the dramatic effects of shock or other physiologic therapies. The early phase of the paranoid outbreak is thus a sensitively significant period and needs to be viewed in this way by all psychiatrists who have occasion to deal with these people.

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(*Continued from page 523*)

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THERAPY WITH ADRENOCORTICOTROPIN (ACTH) AND CORTISONE*

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DURING the past two decades numerous articles have appeared in the medical literature attesting to the value of adrenal cortical extract in various disease states. Because of the small amounts of drug used and the fact that the type of disease treated was usually idiopathic in nature and prone to express spontaneous remission, no great amount of interest, or even belief, was generated by these reports. With the development of less expensive synthetic adrenal preparations and potent methods whereby the patient's own adrenals could be vigorously stimulated, it has become apparent that adrenal steroid hormones have far-reaching effects, not only in states of endocrine deficiency but also in other diseases. In fact, the greater part of the intense enthusiasm which has been accorded the introduction of these new drugs into clinical medicine has been based on their spectacular but often temporary effect in nonmetabolic diseases. Ideas as to the value of these drugs have undergone constant modification since their clinical introduction by Kendall and Hench, with an obvious tendency to regard them with less and less enthusiasm. Regardless of the final opinion with respect to their therapeutic value, there is great need for complete and widely disseminated knowledge of the action of adrenocorticotropic hormone and adrenal steroids, not only because all contemporary physicians must play an active part in determining the place of these drugs in clinical medicine, but also because of the growing realization that pituitary-adrenal relationships are of dominant importance in all phases of medical science.

Exogenous adrenal steroids, such as cortisone, or endogenous hormones, produced through the action of corticotropic hormone (ACTH), may exert their apparently beneficial effects through a great variety of mechanisms. The most obvious is specific replacement of a deficiency, as in use of cortisone in Addison's disease. Another is through the modification of some abnormal physiologic process, though, as in their hyperglycemic effect in hyperinsulinism, not necessarily by acting at the site of the abnormality. Further, they may correct some phase of disordered physiology at the site of the dysfunction, for example, possibly in asthma through a blockade of histamine production. Again, the clinical effect may be entirely nonspecific and result from the numerous changes which are associated with heightened responsiveness of the organism to stress. Lastly, their apparent beneficial effect may be through such mechanisms as analgesia, reduction of fever, or even, unfortunately, primarily on the psychic sphere with or without production of euphoria. Although it is probable that few diseases to which the human is susceptible have now escaped at least limited trial of ACTH or cortisone therapy, the exact mechanism whereby the beneficial effect is obtained is as yet only a matter of conjecture.

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Physiology of the Pituitary—Adrenal Axis

It is apparent that the adrenal cortex is under direct control of the hypophysis and dependent upon its secretion (or secretions) for normal activity. The pituitary hormone especially important for adrenal control is known as adrenocorticotropic hormone, though some evidence, especially from the clinical side, suggests that other tropic hormones may exert an adrenal-stimulating effect. There is also some evidence that the adrenal cortex, although dependent on ACTH for support, may respond by increased secretion of its hormones to stimuli not mediated through pituitary activation. The production of ACTH is dependent upon the level of circulating adrenal hormones or upon some metabolic consequences of their action. A decrease in adrenal steroid hormone permits increased production of ACTH, whereas increased amounts of oxysteroids suppress pituitary activity—thus the rapid increase in pituitary activity which follows more rapid utilization of cortical steroids during times of stress, and, very important from a practical view, the atrophy of the contralateral adrenal in patients with a unilateral adrenal tumor. It is probable that some control of ACTH production is mediated through hypothalamic centers, and these in turn may be effected by stimuli from higher portions of the central nervous system. The secretion of the adrenal medullary hormone, epinephrine, may have a place in pituitary-adrenal stimulation and is possibly of importance in the initial phase of increased adrenal activity associated with stress. Epinephrine appears to increase ACTH secretion either through direct effect on the pituitary or by means of hypothalamic stimulation.

Thus, in summary, it appears as though the adrenal cortex is dependent upon ACTH, not only for maintenance of function, but also for marked increase in hormone production during stress. Other influences may also have some direct effect on adrenal function. ACTH production is under at least partial control by hypothalamic centers and is stimulated by decreased amounts of circulating adrenal hormone, possibly by epinephrine and probably by other means as well.

Although great controversy exists with respect to the exact number of adrenal steroids normally produced, better appreciation of the function of the adrenals rests in acceptance of the probability that the adrenal cortex secretes either 3 types of hormones or hormones with 3 general types of activity. Their general nature may be briefly summarized:

1. Salt-water control:

Hormonal activity, consisting mainly of effect on electrolyte retention and excretion, is represented by changes seen following use of the synthetic substance desoxycorticosterone. This causes sodium retention and potassium excretion, with secondary changes in fluid balance which follow dislocation of these electrolytes. The important chemical feature of this steroid is the absence of oxygen on the 11th carbon atom.

2. Androgenic activity:

That the adrenal cortex produces substances with sex hormone activity is a well established fact, the most important being androgenic in action. This hormone is responsible in large part for the urinary 17-ketosteroids, especially in the female, and for the development of sexual hair in both sexes. Because of its effect on nitrogen retention this hormone is also known as the nitrogen or "N" hormone. As judged by the composition of its excretion product this adrenal androgen is characterized by having a ketone group on the 17th carbon atom.

3. Glyconeogenetic activity:

The most important group of adrenal hormones for this discussion are those which play such a diverse role in effecting body changes. Because they are catabolic (or anti-anabolic) in instituting glyconeogenesis through protein breakdown, they are known as the sugar or "S" hormones. The multiple effects of these steroids are exemplified by the action of cortisone. Because this type of activity is associated only with steroids having an oxygen on the 11th carbon atom, these are known as 11-oxysteroids, and for the reason that addition of oxygen to the 17th carbon atom accentuates the many metabolic changes, also are known as 11-17 oxysteroids.

Thus it appears probable that increased adrenal secretion gives rise to a great number of physiologic changes which can be grouped under (1) electrolyte control, (2) androgenic and anabolic activity, and (3) tissue breakdown. Of these changes the last are more striking and of major importance for consideration of the therapeutic application of ACTH and cortisone. Physiologic changes of the type seen with increased activity of circulating 11-17 oxysteroids can be brought about by pituitary or hypothalamic stimulation, by the administration of ACTH, by the use of adrenal extract, and by treatment with cortisone or similar 11-oxygenated steroids. Of the many possible methods whereby this action may be brought about only the use of ACTH, cortisone or cortisone cogeners is of practical therapeutic value.

CHEMISTRY AND PHARMACOLOGY OF ACTH AND CORTISONE

The adrenocorticotropic hormone of the pituitary ACTH can be obtained in relatively homogeneous and active form from the pituitary gland of animals. The commercial substance consists of a protein of about 20,000 molecular weight, but this can be chemically degraded into smaller molecules which retain the stimulating properties of the parent compound. Following the administration of ACTH there occurs a rapid depletion of adrenal ascorbic acid and a somewhat slower diminution in the cholesterol content of the adrenal gland, the former change being used as a standard assay method for ACTH. This tropic hormone may be administered intramuscularly, subcutaneously or intravenously. When used intramuscularly ACTH should be given every 6 hours because of its rapid inactivation. Considerable effect is obtained when it is administered every 8 hours and some effect when given twice daily, but very little stimulation follows a single daily dose. New, longer-acting preparations appear to be effective when given every 12 hours, and, once adrenal hypertrophy has been attained, a single daily dose may maintain adrenal hyperfunction. Frequently, after continued administration of ACTH, there occurs regression of adrenal hyperfunction. Because of the fact that substitution of an intravenous preparation results in marked adrenal stimulation, it may be assumed that continued use leads to increased inactivation at the site of injection. ACTH is most effective when administered intravenously in the form of a slow drip, being approximately 6 times as potent as when given by the intramuscular route. However, administration must be slow, and it is best given for at least 8 hours a day by slow drip, glucose being used as the vehicle.

Cortisone (11-dehydro-17-hydroxycorticosterone) is the type of 11-oxygenated adrenal steroid which has been used to the widest extent, but it appears as though compound F (hydrocortisone) has essentially the same physiologic action with the exception of greater potency and slower absorption. Which of the several adrenal steroids are normally secreted by the adrenal cortex is unknown. There is some evidence that corticosterone (compound B) can produce all of the physiologic changes which result from stimulation of the adrenals with ACTH. There exists some belief that 17-hydroxycorticosterone (compound F) is the major hormone of the adrenal cortex. The most important point is the fact that oxygenation of the 11th carbon atom, either by a hydroxy or ketone group, gives to the compound marked effect on protein, lymphocytes, etc. and moderate action on electrolytes. The addition of a hydroxy group to the 17th carbon atom enhances the glyconeogenetic effect but diminishes sodium retention. Lack of oxygen on the 11th carbon atom indicates that, while the substance is very effective in controlling sodium and potassium, it has little or no effect on glyconeogenesis, lympholysis and eosinopenia.

Irrespective of whether compound E (11-dehydro,17-hydroxycorticosterone) is a naturally occurring steroid, its activity is such that it closely duplicates the action of endogenous adrenal hormones. This steroid can be synthesized in large quantities and is therapeutically effective both by mouth and by intramuscular injection. When it is given intramuscularly, several hours are taken to obtain the desired therapeutic effect, and thus this drug must be supplemented with adrenal cortical extract in cases of acute adrenal insufficiency. Because of rapid gastrointestinal absorption therapeutic effect is obtained sooner when the drug is given by mouth. Although there is some variation, as measured by different physiologic effects, the oral preparation appears to be about two-thirds to three-fourths as effective as the intramuscular drug.

Exact directions regarding dosage are impossible to outline, being dependent upon the disease under consideration and the desired objective in each individual case. In general, ACTH should be started in large doses and cut down as an adequate degree of stimulation is obtained; 80 to 100 mg. in 4 daily divided doses is the usual starting dose, with graded decrease as stimulation is obtained. When the drug is given intravenously an initial dose of 25 mg. in 500 or 1,000 c.c. of glucose given over an 8- to 10-hour period ordinarily is sufficient. To obtain a comparable effect, cortisone should be given in a dose of 200 to 300 mg. a day divided into 2 or 3 daily doses. In long-term management of nonendocrine disease 50 to 100 mg. of cortisone is the maximal amount that can be used in most instances. Inasmuch as the adult adrenal gland produces approximately the equivalent of 25 mg. of cortisone per day, and because administration of the exogenous drug inhibits production of the endogenous hormone, less than 30 mg. has little therapeutic effect. The marked physiologic changes which accompany dosage of cortisone in excess of 100 mg. a day ordinarily make continued daily administration of that amount totally undesirable.

Although generalization is impossible, a rough estimate of relative physiologic potency is as follows: 25 mg. ACTH intravenously = 150 mg. of ACTH intramuscularly = 300 mg. of cortisone intramuscularly = 400 mg. of cortisone by mouth.

When treatment of a non-hormonal disease is instituted, with either ACTH or cortisone, dosage must be regulated in each individual case so as to obtain maximum therapeutic benefit without causing such severe physiologic changes as to impede the patient's welfare. When no clinical response is obtained, two possibilities must be considered, (1) that the drug is exerting too little physiologic effect, or (2) that the disease process is not responsive to increased exogenous or endogenous corticoids. When ACTH is being given the existence of adequate stimulation can be demonstrated readily by nearly complete eosinopenia, rise in urinary 17-ketosteroids, as well as other physiologic changes, such as weight gain, rise in blood pressure, etc. With cortisone, because of the lack of increase in urinary 17-ketosteroids and meager eosinopenic response it is difficult to assess the degree of physiologic response. Thus, if the clinical response is unfavorable, the dose of hormone must be increased to the point of "toxic" symptoms before its lack of therapeutic value can be definitely established.

Because of the temporary adrenal atrophy which follows use of any exogenous adrenal steroid, such as cortisone, it is extremely important to avoid abrupt discontinuance of this drug after it has been given for an extended period of time. Even a normal person will show evidence of temporary adrenal insufficiency after cessation of cortisone therapy, and, if the disease under treatment is of such severity as to require large amounts of adrenal hormone, rapid fatality may ensue. Consequently, when cortisone has been used for over 10 to 14 days the dose should be cut down gradually, and 2 or 3 days before the drug is completely stopped intravenous ACTH should be commenced. The latter drug should be continued for 2 or 3 days after cortisone is stopped, the dosage also being tapered down prior to complete discontinuance.

MAJOR PHYSIOLOGIC CHANGES FOLLOWING ACTH AND CORTISONE

The myriad physiologic changes which accompany the administration of ACTH with few exceptions accompany therapy with compounds E and F. Certain of these are of special importance. Eosinopenia, which is due to either accelerated destruction or sequestration in the reticulo-endothelial system, provides not only a valuable test of adrenal responsiveness but serves as a rough index of adrenal stimulation during therapy. A decrease in circulating lymphocytes and involution of thymic and lymphoid tissue occurs. Increased protein breakdown may be of such a degree as to necessitate increased intake. Severe mental changes such as euphoria or, more rarely, severe depression are of serious consequence. Action on fibroblasts may impede the healing of wounds. Many enzyme systems of the body undergo marked dislocation. Inhibition of antigen-antibody responses has important clinical ramifications. Increased urinary excretion of many substances, including glucose, phosphorus and uric acid, may be attributed, at least in part, to change in tubular reabsorption of these materials. Sodium retention and potassium depletion are constant problems which have special import in the patient with basic salt retention. Increase in gastric pepsin may be significant in the induction of peptic ulceration in patients treated with ACTH or cortisone. These, as well as the many other changes, must be kept in mind not only because certain ones are of special importance in each type of disease being treated, but also because many of the physiologic changes present problems in management irrespective of the disease under consideration.

CLINICAL APPLICATION OF ACTH AND CORTISONE

Diagnostic tests:

Both ACTH and cortisone are of value in the diagnosis of endocrine disease. Administration of ACTH by vein for 1 or 2 successive days to normal patients will result in a significant decrease in peripheral eosinophiles and a rise in urinary 17-ketosteroids, whereas in patients with primary adrenal insufficiency these responses fail to occur. In adrenal failure secondary to hypopituitarism intravenous administration of ACTH results in a slower development of eosinopenia, and 17-ketosteroid elevation is less marked than in the normal individual, but the response is much greater than in patients with primary adrenal disease. The degree of eosinopenia provides no adequate quantitative evaluation of adrenal function, but the amount of increase of urinary 17-ketosteroids is of value in estimating adrenal reserve.

Although a single intramuscular injection of ACTH will produce considerable eosinopenia in the normal person, this test is much less reliable than the intravenous test outlined above. It is now generally appreciated that the eosinopenic response to epinephrine is too inconstant and nonspecific to provide any valid data for the diagnosis of hypopituitarism or Addison's disease.

In patients with the adrenogenital syndrome who demonstrate elevation of urinary 17-ketosteroids the response to administration of cortisone is of value in differentiating between adrenal tumor and hyperplasia. In instances of tumor the urinary excretion of 17-ketosteroids is not usually affected, but in adrenal hyperplasia a marked decrease of 17-ketosteroids accompanies the administration of compound E.

Diseases in which ACTH and adrenal steroid hormones are particularly valuable:
Addison's disease (cortisone)
Panhypopituitarism (ACTH or cortisone)
Following removal of a unilateral adrenal tumor
Following adrenalectomy for cancer or hypertension
Acute adrenal insufficiency (cortisone and adrenal extract)
Adrenogenital syndrome due to adrenal hyperplasia (cortisone)

The above small group of disorders consists of true endocrine disease. Only in these conditions can ACTH or cortisone be regarded as acting in truly specific fashion.

Conditions in which ACTH or cortisone may institute complete or temporary remission of the disease process:
Idiopathic hypoglycemia
Anorexia nervosa
Sprue (refractory)
Ocular disease
  - Inflammatory processes
  - Disorders with subacute exudative phenomena

Erythema nodosum
Acute exfoliative dermatitis
Acute allergic states
Status asthmaticus
Nephrosis
Drug sensitivity reactions
Snake or spider bites
Thrombocytopenic purpura
Acquired hemolytic anemia
Acute gout
Vasomotor rhinitis with polyp formation

ACTH or cortisone should find major use in the above group of diseases. They are of especial value in assisting the patient to withstand a temporary disorder such as an acute sensitivity state. They are worthwhile in treating an acute phase of chronic disorder, such as status asthmaticus. They are valuable adjunctive agents in helping in the management of such diseases as sprue or anorexia nervosa in which the induction of at least temporary improvement may help materially in management of the patient.

Diseases which are only temporarily benefited by ACTH or cortisone but for which no other effective therapy is available:
Acute disseminated lupus erythematosis
Periarteritis nodosa (with acute symptoms)
Dermatomyositis
Pemphigus
Sarcoidosis
Leukemia
Multiple myeloma

This group of disorders, exemplified mainly by those referred to as the collagen diseases, are usually aided only temporarily by steroid hormone therapy. However, lack of other more adequate therapy makes ACTH or cortisone worthy of trial.

Diseases in which ACTH and cortisone are of benefit only if prolonged treatment is possible:
Rheumatoid arthritis
Chronic disseminated lupus erythematosis
Dermatomyositis
Scleroderma
Psoriatic rheumatism
Adrenogenital syndrome due to adrenal hyperplasia

In this group of diseases, exemplified mainly by rheumatoid arthritis, ACTH and cortisone provide definitely beneficial effects, but in most instances only for such time as the drug is continuously used. Cessation of therapy usually results in immediate recurrence of the disease process often to a more severe degree than that existent prior to therapy. Consequently, adrenal steroid therapy or adrenal stimulation should be seriously considered only if continuation of the drug is feasible.

Diseases in which hormone therapy appears to have a limited value in some cases and under certain conditions, opinion as to the final place in management being dependent on further study:

Rheumatic fever
Rheumatic carditis
Beryllium poisoning
Psoriasis
Other chronic skin disorders
Bronchial asthma
Shoulder - hand syndrome
Acute delirium tremens
Ulcerative colitis
Periarthritis of shoulder ("frozen shoulder")
Hepatic disease
Osteoarthritis
Chronic debility and malnutrition
Complicated convalescence from surgical procedures
Keratoderma blenorrhagicum
Interstitial cystitis
Degenerative eye disease
Regional enteritis

The above group of disorders has been studied to moderate degree in the past three or four years. In general it may be said that some beneficial effect has been obtained but only in a portion of the cases. Treatment with cortisone or ACTH should be seriously considered in all of these diseases, but the true value of steroid hormone therapy is as yet unknown.

Diseases in which ACTH or cortisone provide only occasional beneficial effect but in which physiologic implications indicate the desirability of further study:

Infectious disease
Myasthenia gravis
Multiple sclerosis
Lymphoma
Hodgkin's disease
Mycosis fungoides
Chronic obstructive emphysema
Chronic hepatic disease
Myeloma
Malignant exophthalmos
Rh sensitivity
Severe burns
Peritonitis
Chronic gout
Chronic alcoholism
Refractory anemia
Thyrotoxicosis
Alopecia areata
Alopecia totalis

In this group of diseases ACTH and cortisone have been used to a limited degree. In general the therapeutic results have not been spectacular. However, because of certain physiologic changes induced by steroid hormone therapy, reversal or modification of the physiologic abnormalities seen in these diseases is possible and further investigation is deemed warranted.

Disorders which are not benefited by ACTH or cortisone:

Progressive muscular dystrophy
Progressive muscular atrophy
Wilson's disease
Sydenham's chorea
Xanthomatosis
Frost bite
Paget's disease of the bones
Sickle cell anemia
Pernicious anemia
Essential hypertension
Malaria
Herpes simplex
Herpes zoster
Poliomyelitis
Polyposis of bowel
Blastomycosis

This group of disorders comprises the great majority of diseases to which man is heir and the following list includes only those which have been given more complete study. In general afflictions of the nervous system have responded most poorly to these newer hormonal agents.

Contraindications to the Use of ACTH and Cortisone

These may be roughly divided into absolute and relative contraindications with the basic exception that all contraindications are in a sense of the word relative. In a patient suffering from a mild allergic state any associated disease or condition which might respond deleteriously to ACTH would be an absolute contraindication. On the other hand, in a patient severely ill with acute disseminated lupus erythematosis there would be no contraindication to the use of these drugs.

Absolute contraindications:
- Tuberculosis—active and latent
- Psychosis
- Peptic ulcer
- Renal insufficiency
- Congestive failure
- Marked hypertension
- Cushing's syndrome
- Severe diabetes mellitus

Relative contraindications:
- Osteoporosis
- Osteomalacia
- Severe psychoneuroses
- Acute nephritis
- Epilepsy
- Myocardial infarction
- Active syphilis
- Sickle cell anemia
- Severe infection
- Cancer of the breast
- Cancer of the prostate
- Hirsutism
- Acne

COMPLICATIONS OF ACTH AND STEROID HORMONE THERAPY

The many deleterious effects which accompany the action of excessive endogenous or exogenous steroid hormones are frequently but erroneously referred to as "toxic" reactions. These should be more properly viewed as expected, though often undesirable, physiologic effects of steroid hormones. While hyperglycemia is undesirable in the normal patient and a great problem in the diabetic, elevation of blood sugar is the therapeutic goal in idiopathic hypoglycemia. In the treatment of non-endocrine disorders therapeutic effect is ordinarily not obtained until at least minimal undesired physiologic changes occur. Whereas even the mildest "toxic" effects call for cessation of treatment in self-limited disease, treatment should be vigorously pursued despite the occurrences of marked physiologic changes in patients with potentially fatal disease. Following are outlined the major undesirable effects resultant from increased oxysteroids, together with measures often efficacious in lessening their severity.

Sodium retention. This frequent complication of hormone treatment, which may manifest itself as edema, hypertension or congestive failure, is usually readily modified by limitation of salt intake. If it is severe, or especially undesirable because of the presence of an edematous disorder, therapy with mercurials may be necessary with the provision of providing adequate potassium intake at the time of the diuresis. There is increasing evidence that administration of potassium salts during steroid hormone treatment will not only aid in prevention of sodium retention but may in itself decrease symptoms and signs of excessive sodium retention.

Hypokalemia. Potassium depletion rarely becomes a problem if the patient is eating well, especially of foods high in potassium, such as meat, bananas, milk and orange juice. Because of the increased sodium excretion which accompanies the administration of potassium salt, it is considered advisable by many to supply potassium daily in the form of the chloride, acetate or phosphate.

Tuberculosis. That steroid hormone therapy may activate latent tuberculosis or stimulate the spread of an already active process makes it imperative that this disease be ruled out prior to institution of treatment. In addition, patients with a basic disease or basic symptoms possibly due to tuberculosis should be carefully observed during treatment with ACTH or cortisone. If any evidence of tuberculosis appears, treatment should be immediately discontinued.

Peptic ulcer. Considerable evidence has been presented that peptic ulceration may be instituted or aggravated by adrenal hormones, possibly by the increased hydrochloric acid or pepsin secretion. ACTH and cortisone should be used with care in patients with a history of ulcer or with ulcer symptoms. Occurrence of the latter during treatment calls for immediate investigation, and, if ulcer is present, steroid hormone treatment should either be discontinued or the dosage decreased to the lowest effective amounts. An important point to keep in mind is that perforation of a viscus may occur without the usual signs and symptoms attendant upon the development of peritonitis. Thus, in any patient with symptoms suggesting peptic ulceration, rapid deterioration of the patient's condition should lead one to suspect the possibility of perforation even if the usual signs and symptoms are absent.

Mental changes. Some degree of mental change is a frequent occurrence during treatment with cortisone or ACTH. It usually appears in the form of mild euphoria, which in some diseases is a benefit. However, this symptom may be extremely severe, necessitating cessation of treatment. A graver manifestation is the occurrence of depression, which may be so severe as to necessitate confinement in a psychiatric hospital. Steroid therapy should be avoided in patients with psychoses, history of psychotic reactions and, unless absolutely necessary for the welfare of the patient, in individuals with marked emotional instability. If severe mental reactions occur during treatment, all efforts should be made to establish a normal electrolyte pattern by withholding sodium and administering potassium.

Aggravation of diabetes mellitus. Accentuation of diabetes is an obvious complication of treatment which can ordinarily be handled satisfactorily by increasing the dose of insulin. If such does not suffice, the hormone therapy must be stopped immediately.

Virilization. Development of acne and increase in hirsutism, more common in persons of a hirsute race or disposition, is rarely a problem except when ACTH is given in large amounts for extended periods of time. These manifestations of androgenic activity can ordinarily be managed satisfactorily by decreasing the dose of ACTH. In patients who are to receive ACTH in large amounts for long periods of time, warning must be given of the possibility of development of this complication.

Development or accentuation of infectious disease. Although some beneficial effect has been attributed to the use of ACTH and cortisone in patients with infectious disease, it appears obvious that the infection itself becomes more severe unless well controlled by the use of antibiotics. Thus ACTH or cortisone should not be used unless the infectious process is being adequately treated. A more serious problem is the development of an unsuspected infection during cortical hormone therapy, since the usual signs of infection may be masked by the physiologic effects of the drug. Consequently the possibility of the development of infection should be constantly considered, especially with reference to the genitourinary tract, and immediate steps must be taken to identify the organism and institute treatment. Cortisone and ACTH are not recommended for routine use in the treatment of infectious disease, although well controlled studies are necessary in order to establish the value of these drugs in adjunctive management of infection.

Masking of signs and symptoms of disease. Because of their effect in alleviating pain, depressing febrile response and affecting the white blood cell count, ACTH and cortisone may mask the usual signs and symptoms of a disease process. This point has been touched on in reference to peptic ulcer and infection. The possibility of such a problem must be kept constantly in mind with respect to these processes, as well as appendicitis and other abdominal emergencies.

Impaired wound healing. The 11-17 oxysteroids have an inhibitory effect on fibroblastic proliferation, thus inhibiting wound healing, but when the usual doses of ACTH and cortisone are used this does not ordinarily provide a serious problem. In debilitated patients whose wound healing is poor the problem of protein balance must be considered, and if adequate protein is supplied it is possible that continuation of ACTH and cortisone therapy will be possible.

Allergic reactions to ACTH. Sensitivity reactions to the specific or nonspecific protein components of ACTH are rare and will undoubtedly become even less frequent with use of a more highly purified preparation. If reactions occur in a patient who must have further therapy, substitution of another species source of ACTH can be considered, but it is probably advisable to use either compound E or compound F which do not cause allergic manifestations.

Resistance to ACTH. Not uncommonly patients treated with intramuscular ACTH, especially over prolonged periods of time, gradually lose ability to respond. That this phenomenon probably results from increased tissue inactivation of the drug is indicated by the fact that restoration of adrenal stimulation ordinarily will result from intravenous administration of ACTH. There appears to be similar resistance to intramuscular compound E, but not to this drug when it is administered orally.

Development of Cushingoid features. As might be expected intense adrenal stimulation or administration of adrenal hormones will result in the occurrence of some of the features seen in Cushing's syndrome. These do not become severe unless the drug is given in excessive amounts over long periods of time and regress rapidly following cessation of treatment.

Development of hypothyroidism. There is some evidence that both ACTH and adrenal steroid hormone may cause decreased thyroid function, especially in long-term therapy. Because of the possibility that thyroid hormone deficiency may lessen the peripheral action of steroid hormone, and the fact that such definitely decreases the ability of the adrenals to respond to corticotropin, administration of thyroid hormone should be considered in all patients under treatment with ACTH or cortisone who develop any refractoriness to treatment or clinical evidence of impaired thyroid function.

Pathologic fractures. Severe osteoporosis may follow the long-continued use of cortisone with resulting pathologic fractures. Although this complication is to be expected in view of the fact that osteoporosis is commonly seen in Cushing's syndrome, there is at times some other cause for osteoporosis also present.

POLYPS OF THE GASTROINTESTINAL TRACT

A Challenge in Preventive Medicine

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POLYPS of the gastrointestinal tract are one of the most common afflictions of man. They are also one of the most important through their etiologic relationship to carcinoma. And, to the medical profession, they present one of our greatest challenges, since, by careful diagnosis and meticulous care in proper management, they may offer our greatest opportunity in preventive medicine.

It is variously estimated that between 2½ and 10 per cent of persons have polyps of the gastrointestinal tract at some time during life. In 1,460 consecutive autopsies, Hellwig reports an incidence of 9.5 per cent. This may be compared with 7 per cent reported at the Lahey Clinic by Swinton and Haug. Data from sigmoidoscopic examinations vary with the type of patient seen, the presence or absence of symptoms, age, etc. Steele and Brown in 1,500 routine examinations reported 5.2 per cent patients with polyps in the visible bowel. In our own series, as reported by Dr. Vincent Young, in 1951, 500 patients selected because of the absence of symptoms showed on routine sigmoidoscopy an incidence of 8.8 per cent with polyps. Many others, of course, are found after evidence of bleeding, bowel irritability, intussusception, obstruction, anemia, or even similar findings in other members of the family, making complete examination mandatory. If we consider, also, that in the United States alone there are nearly 35,000 deaths from carcinoma of the large bowel yearly, the need for early routine examination as a prophylactic procedure becomes imperative.

You may ask if is there any proof of the relationship of polyps to carcinoma of the bowel. Absolute proof of the transition from benign adenomatous polyps is lacking. But the indirect evidence of a polyp-cancer relationship is overwhelming.

A. Carcinoma often develops at the exact site of a previously noted polyp. This was noted as early as 1934 by Brust in a patient refusing polypectomy. In 87 such patients, 4.6 per cent developed malignancy in the same area.

B. A striking parallelism exists in the distribution of polyps and carcinoma. Dr. R. J. Coffey has frequently pointed out this relationship. Both are found most frequently in the rectum, then the sigmoid, etc.

C. Polyps are found adjacent to malignant lesions. In Carl Schlicke's series of resected carcinomas of the large bowel, 37.4 per cent had associated polyps nearby. Malignant change was found in 14.3 per cent of these.

D. Multiple carcinomas are common in the large bowel. The simultaneous development of separate carcinomas in 4 to 5 per cent of cases is at least suggestive of its development in multiple disseminated polyps.

E. Carcinoma is found very frequently in diffuse polyposis. Dr. Coffey has reported 22 such instances in 33 cases of familial polypoid disease. It is believed that all would develop carcinoma if given sufficient time.

F. Carcinoma in situ is found in the histologic study of otherwise benign polyps. This will obviously progress to a more invasive process if allowed to remain.

G. Carcinoma of the large bowel is often polypoid in character. In established carcinoma the appearance often suggests its previous origin in a benign polyp.

Before considering the diagnosis and management of polyps in the various portions of the intestinal tract, we should consider the specific histologic types encountered. The microscopic characteristics which distinguish the abnormal from the benign should be held clearly in mind, and close coöperation must be maintained between the pathologist and surgeon if we are to give safe and adequate treatment.

Grossly, a polyp is any mucosal projection into the lumen of the bowel. It is generally adenomatous, i.e., composed chiefly of the underlying glandular components. These are commonly smooth, but lobulated, usually pedunculated, and darker than the surrounding mucosa. More rarely they are softer, lighter, papillary villous projections of the superficial epithelial layer. These may cover a larger area, although both types may be sessile rather than pedunculated.

Adenomatous polyps have been classified by H. E. Bacon on the basis of their microscopic appearance as follows:

1. Benign adenoma—with uniform proliferation of glands regular in size and shape. The cells are tall, columnar, one row deep, with nuclei basal in position and uniformly stained.
2. Adenomas with "atypism"—with localized areas of nuclear hyperchromatism, beginning loss of polarity of nuclei, occasional atypical mitoses.
3. Carcinoma in situ—with pleomorphism, hyperchromatism, loss of polarity, atypical mitosis, irregularity of gland pattern; but with the basement membrane intact.
4. Adenocarcinoma, grade I—as above, with invasion into the muscularis mucosae.
5. Adenocarcinoma, grade II—with more marked invasiveness and less differentiation, but with evidence of benign adenomatous origin still remaining.
6. Polypoid papillary adenocarcinoma—frank carcinoma, with presumptive evidence of having arisen in an adenoma.

In addition to the histologic aspects, it is well to differentiate clearly between the various polypoid conditions on the basis of distribution and etiology. Great confusion may arise because of the multiplicity of terms used, such as congenital polyposis, multiple polyposis, adenomatosis, disseminated adenomata, etc. Polyposis refers strictly to the condition wherein multiple polyps are found. I prefer to speak of:

a. Localized polyposis—which means multiple polyposis or the presence of multiple polyps in a localized area.

b. Disseminated polyposis—where there are multiple polyps, separate and distinct, distributed sparsely over wide, separated areas.

c. Diffuse polyposis—which is the usually accepted familial polyposis or congenital polyposis with polyps diffusely spread throughout the intestinal mucosa.

There is also the separate entity of acquired polyposis or polyps secondary to preëxisting inflammation such as ulcerative colitis, the diagnosis being confirmed by the destruction and scarring evident between the polyps.

GASTRIC POLYPS

Benign polyps of the stomach are rare. Wm. MacCarty in 4,129 gastric surgical specimens found only 36 polyp cases, an incidence of 0.8 per cent. The diagnosis is often made post mortem, less frequently by X-ray examination or at operation. Twenty-five per cent are malignant. Were it feasible to perform routine gastroscopy, the incidence might be found to be greater. In general, the symptoms are minimal and often overlooked. Anemia may be present, severe bleeding can occur, or even pyloric obstruction result from a large polyp. There may be a relationship to chronic gastritis, although the lesions may be on a familial basis as when associated with polyposis elsewhere.

Carcinomatous changes in gastric polyps are often seen, but it should be pointed out that the polyp as such is not considered the important precursor of carcinoma of the stomach.

Treatment should be prompt excision with an adequate base, followed by microscopic evaluation and subsequent periodic rechecks for additional polyps or recurrent cancer. Fortunately, glandular involvement is rarely seen with carcinomatous changes in a gastric polyp, and following transgastric resection the prognosis is good.

Polyposis gastrica with diffuse multiple gastric polyps is even more rare. When more than a few polyps are present or when they are associated with hypertrophic gastritis the treatment is gastric resection because there is a high incidence of carcinoma. In the diffuse cases 20 to 50 per cent show malignant changes.

POLYPS OF THE SMALL BOWEL

Nonmalignant tumors of the duodenum are rarely seen. In one series of 6,044 postmortem examinations, only 15 polyps were found. Clinically, they may produce severe bleeding and yet be overlooked on roentgenologic examination or even surgical exploration. When found, treatment is transduodenal excision.

Polyps of the jejunum and ileum make their appearance often as the result of intussusception. However, tarry stools or unexplained anemia may first be noted. Recurrent bouts of mid or upper abdominal cramping call for a small bowel X-ray. And this study may be most difficult. Weber thinks nevertheless that if forewarned of the need of small bowel survey, with sufficient time and persistence most small bowel polyps can be visualized.

Treatment is excision, and this is often of necessity resection with end-to-end anastomosis. The latter is preferred when intussusception has occurred or when adequate local excision would cause constriction or kinking of the small bowel.

POLYPS OF THE LARGE BOWEL

Approximately 25 per cent of adenomatous polyps lie above the reach of the sigmoidoscope. To disclose these precancerous or early carcinomatous lesions while readily curable is a grave responsibility. Many produce no symptoms. Our threshold of suspicion must be sufficiently low to demand X-ray examinations in cases of minor bleeding, change in bowel habit, or for vague abdominal discomfort. And in such X-ray examinations a search for polyps should be specifically requested to insure the use of double contrast and possibly tannic acid-barium technics. Needless to say, meticulous bowel cleansing is required prior to roentgen examination. We should further demand X-ray examination in all cases in which rectal polyps were found or in which the family history is suggestive.

The management of isolated polyps when found by X-ray examination has many pitfalls. Confirmatory X-ray examinations are always insisted upon before surgery. The bowel is then prepared by chemotherapeutic or antibiotic agents following thorough saline cleansing. The use of terramycin per os for 48 hours after purging has proved adequate. Transcolonic excision may then be carried out with safety in most instances. Exact localization of the polyp after opening the abdomen may be a problem. With a clean bowel palpation between the flattened fingers should be sufficient, but in an obese individual with tense epiploic appendages this may be hopelessly inadequate. The Cameron light is of assistance in canvassing the bowel by transillumination. Colotomy in the general region indicated by the X-ray films may be indicated and justifiable. It is my custom also because of the frequent finding of adjacent polyps to have a sterile sigmoidoscope available to explore transabdominally the adjoining segments of bowel.

With pedunculated polyps simple excision within the lumen is sufficient. With a sessile lesion or a thickened pedicle, wedge resection may be preferable. Where multiple polyps are found closely associated a sleeve resection and end-to-end anastomosis is recommended.

Facilities for immediate microscopic study should be available for examination of the polyps as removed. When malignant change is found more extensive resection is indicated. And when there is evidence of extension into the pedicle or adjacent bowel wall, radical resection with removal of the lymphatic and vascular supply to the segment is mandatory.

In patients with sparsely scattered polyps in various portions of the large bowel multiple colotomies may be necessary. Gross has suggested in children 3 non-diverting colostomies as a preliminary procedure for bowel access. Usually the entire bowel can be canvassed through 3 incisions into the lumen. Snare excision or fulguration can be done through the scope. But these polyps, no matter how many or how few, must be removed. Ten per cent show malignant degeneration.

Diffuse Familial Polyposis

This condition, which has been variously termed "multiple polyposis," "polypoidosis," "adenomatosis," etc., I prefer to call "diffuse familial polyposis" because of its diffuse nature and familial occurrence. The disease is transmitted usually as a Mendelian dominant, and many family pedigrees have been published, adequately demonstrating the familial relationship. One of our patients had at least 12 members of her family in 4 generations with the condition.

There are no diagnostic symptoms. Bleeding, diarrhea, or frequent loose stools have been noted in 95 per cent of persons affected, but all symptoms may be absent until weight loss, anemia, obstruction or distant metastases become evident.

Diagnosis, on the other hand, is readily made if the proctoscope or X-ray examination is used before serious complications arise. Differentiation need only be made from post-inflammatory pseudopolyposis of ulcerative disease of the colon in which interpolyp scarring and inflammatory hyperplasia are seen.

Treatment is extirpation of all of the colon inaccessible to the proctoscope. Only in the very young in whom polyps are minute in size may deferment be permitted until a more optimum age for surgery. When the malignant potentiality of each individual polyp is multiplied by the myriad polyps present, this disease is seen to be the most dangerous precursor of malignancy known.

Total extirpation of the colon with the formation of a permanent iliac stoma has been preferred by Dr. Richard Cattell. This obviates the need of frequent follow-up fulgurations and the danger of malignancy in the retained rectal segment. Dr. C. W. Mayo, on the other hand, states a preference for preservation of the sphincter and the distal 20 cm. of bowel if it can be adequately cleared of polyps by fulguration. He believes that vigilance is a small price to pay for the degree of normalcy afforded by this procedure over the use of the Rutzen bag. Diffuse confluent polypoid involvement is not amenable to fulguration, however, without the formation of a malfunctioning scarred segment, and any malignant polypoid degeneration demands extirpation of the lower segment. It should be mentioned that stage-procedures for colectomy are no longer necessary nor even justifiable in the ordinary case. Ileosigmoidostomy is done with a primary resection in such a way as to avoid a blind pouch or retained segment with inaccessible polyps. Preservation of the anal sphincter with the establishment of an anal pull-through ileostomy has been advocated by some. Its rationale lies in the lack of any reason for sphincter sacrifice in the absence of malignancy, as well as in the convenience and safety afforded when repeated fulgurations are not required. Unfortunately, 6 to 12 months are required before there is even partial control of defecation, and to date the results have not been convincingly successful.

The following is an illustrative case.

A 34-year-old woman, case No. 5740, was operated upon in 1947 for diffuse polyposis of the large bowel following a short period of bloody diarrhea. A survey of her family revealed a remarkable history. The patient's father and grandfather both died at an early age, probably of carcinoma. One paternal uncle died of carcinoma of the colon at 30. Two others died of probable abdominal cancer. Of her own siblings, 1 had a colectomy at 33 for polyposis. One died at 37 of obstruction following colectomy. A second died of polyposis and obstruction. Of her cousins, 1 had polyposis and died at 25 after a stage-procedure. Another died of obstruction at 21. One niece on routine survey examination was found to have diffuse polyposis. Thus, at least 12 members in 4 generations of this family are proved to have had or are suspected of having had the condition (see chart 1).

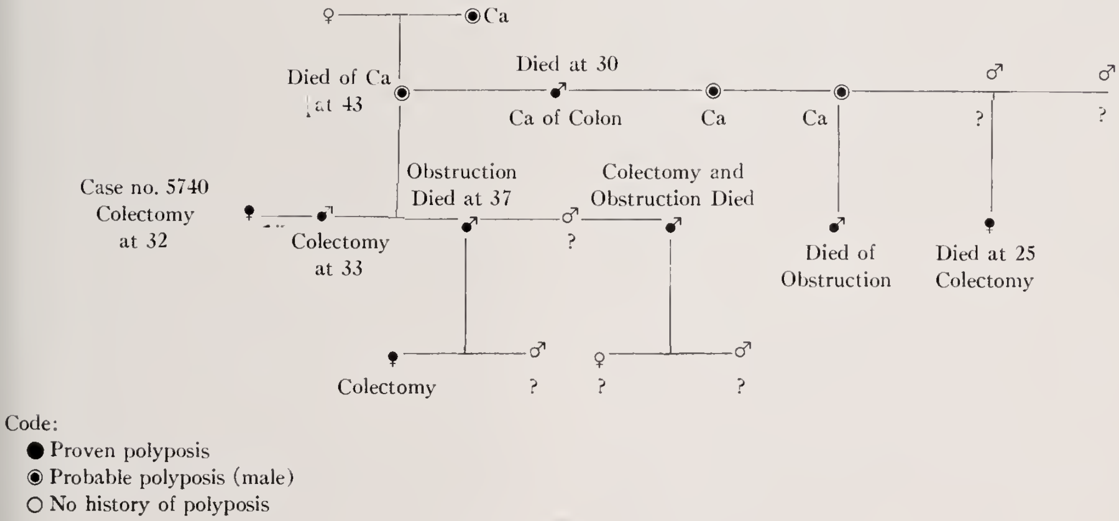
THE PIGMENTATION AND POLYPOSIS SYNDROME

Another group of individuals with familial polypoid disease manifest a distinct syndrome characterized by spotted pigmentation of the lips together with scattered polyps anywhere in the gastrointestinal tract. Most frequently the small bowel is involved and the presenting symptom may be intussusception. The first report of this syndrome was made by J. L. A. Peutz of The Hague in 1921. Dr. Harold Jeghers has reported 10 cases of this condition and collected 12 other proven cases. Of the 10, all required small bowel surgery. Polyps may also be present in the nasal, gastric and rectal areas. Although this condition is distinct from the ordinary polyposis of the colon it is similarly hereditary in origin. Although rare, it should be widely known to permit careful survey for polyps in patients with this characteristic pigmentation of the lips. The following is an illustrative case.

CHART 1

Diffuse Familial Polyposis

Family History of Case No. 5740


♀
◉ Ca
Died of Ca at 43
Died at 30
Ca of Colon
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Case no. 5740 Colectomy at 32
Colectomy at 33
Obstruction Died at 37
?
Colectomy and Obstruction Died
Died of Obstruction
Died at 25 Colectomy
Colectomy
?
♀
?
?
Code:
● Proven polyposis
◉ Probable polyposis (male)
○ No history of polyposis

Miss C. B., No. 7173, was first seen at the Yater Clinic on May 10, 1949, at the age of 32. Pigmentation of the lips was noted (figure 1) and 5 clustered recto-sigmoidal polyps found on routine sigmoidoscopic examination. A biopsy was performed and benign adenomas reported on histologic examination. These were destroyed by fulguration. In September, 1949 she suffered a typical attack of intussusception. Resection of a segment of bowel was required. A Meckel's diverticulum was present, but also a large benign polyp of the small bowel was

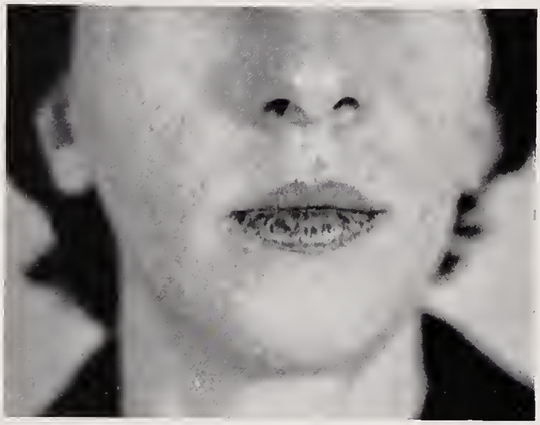
FIG. 1. Case No. 7173. Lip pigmentation characteristic of the pigmentation-polyposis syndrome.

present. In February, 1950 a cholecystectomy was required for calculus. On complete examination for other abnormalities, a gastric polyp was palpated. Transgastric exploration revealed a 1 cm. polyp on a long pedicle attached near the greater curvature, with 2 smaller associated polyps present. These were all removed by wedge excision and proved to be benign. This patient has remained well. Repeated sigmoidoscopic examinations have failed to reveal any recurrence of rectal polyposis.

This case is a good example of the syndrome reported by Drs. Peutz and Jeghers. The pigmentation should be sufficient to alert the physician for a more complete gastrointestinal survey.

Rectal and Sigmoid Polyps

From a practical standpoint our interest probably should be centered on these polyps within the reach of the sigmoidoscope. Certainly 75 per cent or more of polyps can be so visualized. Most of these are asymptomatic and will be discovered only by routine sigmoidoscopic examination. They are not readily felt on digital examination even when relatively large. Adequate cleansing and careful search of the bowel are required to reveal these readily accessible and often readily curable premalignant lesions.

When polyps are discovered in this region we should have a clear idea of what constitutes adequate and safe management. First, we determine whether or not malignancy is present. From the clinical standpoint we can make several generalizations:

1. The greater the number of polyps, the greater is the likelihood of malignancy.

2. The greater the size of the polyp, the more often malignant degeneration has occurred. Such transformation, however, has been found in lesions under 1 cm. in size.

3. Sessile polyps are more likely to show malignant change and are more serious from the standpoint of complete removal.

4. The exuberantly vascular and irregular surface suggests carcinoma, while the pale, pink, smooth surface more often connotes a benign lesion.

5. Any induration of the base with decreased mobility is suggestive of dangerous malignant involvement. Exact diagnosis, of course, requires microscopic examination of the polyp and its base. Such histologic examination is urged in all instances in which total removal of the lesion for examination is possible. Fulguration alone is not entirely satisfactory.

Specific Management

My plan of treatment varies with the type of lesion found and with its location.

A. Solitary polyps above the peritoneal reflection.

1. Pedunculated lesions:

   These polyps may be removed by the fulgurating snare and a microscopic check made of the polyp and its stalk. Unless the base is involved a complete cure is anticipated. There is the theoretical danger of perforation of the bowel at this level due to tenting of the wall by excessively deep fulguration. Bacon has recommended the abdominal approach to all of these polyps. I have never seen this complication and believe that with care it is a reasonably safe method of treatment. Transabdominal sigmoidotomy would, however, be indicated when the gross appearance, lack of mobility, and thickening of the stalk suggest malignancy.

2. Sessile lesions:

   Although many men recommend fulguration alone in these lesions, Coffey, Bacon, and others suggest biopsy first followed by adequate fulguration of the base. With any histologic deviation from the normal such as "atypism," transabdominal removal with wide local excision is done. If truly in situ, carcinoma may be likewise eliminated by wide wedge excision; but with definite carcinoma in a high-lying sessile lesion, an anterior resection of the bowel with end-to-end anastomosis is indicated.

B. Solitary polyps below the peritoneal reflection.

1. Pedunculated lesions:

   Local excision of the lesion either directly or by snare is the accepted procedure with microscopic study of the polyp and pedicle. Radical surgery with sacrifice of the rectum is indicated if there is extension into the base of the stalk. With in situ involvement wide local excision may be sufficient.

2. Sessile lesions:

   Preliminary biopsy is essential in these cases. Deep fulguration can be more readily performed at this level but is safe only in the known benign lesion. If "atypism" is encountered wide local excision may be justified using a posterior approach where required. With in situ or grade I lesions when sessile, radical resection must be advised with removal of all available lymphatic and vascular supply.

C. Multiple polyps:

When scattered multiple polyps are found they are handled as the individual ones, but with an awareness of the greater possibility of malignant change in some of them and the need of removal of all polyps present.

With diffuse rectal polyposis, the number of polyps and the degree of cellular change found will determine the advisability of removing or retaining the rectum after colectomy.

Follow-up Care in Polyp Cases

In the immediate postoperative period following the removal of a large polyp, observation for bleeding must be made. Although rare, bleeding from incomplete fulguration of the base may be alarming and difficult to control at a high level.

In all cases in which polyps have been found in the rectum special X-ray examination of the large bowel is requested to rule out polyps at a higher level. The roentgenologist must be advised as to the purpose of the examination, and complete cleansing is essential.

Frequent follow-up proctoscopic examinations are necessary. One-month, 3-, 6- and 12-month rechecks are done with annual follow-up thereafter.

Summary

We have stressed the high incidence and importance of polyps in the gastrointestinal tract. The responsibility of the physician in discovering these lesions even in the absence of symptoms has been emphasized. This implies careful proctosigmoidoscopic examinations in all persons, particularly those over 40, even with absent or mild symptoms or with a family history of bowel trouble. The requirement of adequate X-ray examination of the remaining bowel on the finding of rectosigmoidal polyps is pointed out. A careful choice of the proper procedure to ensure cure where possible is indicated. Equally important, and likewise the responsibility of the physician, is a complete "follow-through" in management of polyp cases with recheck examinations sufficiently often to guarantee the safety of the patient. To do so is the obligation of each of us. To neglect available diagnostic methods or to treat polyps without meticulous care and follow-up is to miss a golden opportunity in the preventive treatment of malignancy.

UNUSUAL DISEASES OF THE SPLEEN*

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THERE is no organ in the body which is less understood and more maligned than the spleen. The ancient Greeks thought that extirpation of the spleen would improve the athlete's wind and that the spleen was the seat of violent emotions. Medical authors today reveal violent emotions themselves when they write about the spleen. Some think that it secretes a hormone which in some way controls cell maturation in the bone marrow[1] and also influences the pituitary adrenal response to stress.[2, 3] Others[4] believe that the primary function is that of a blood reservoir. There is no full agreement concerning any function of the spleen.

This thesis is not written to solve any of these problems but primarily to review some conditions of the spleen with which the average internist is little familiar and also to show that a palpable spleen should not throw him into a mental tailspin from which neither he nor the patient may recover.

ANATOMY OF THE SPLEEN

The spleen lies in the left hypochondrium under cover of the ninth, tenth and eleventh ribs. The surface projection of the normal spleen is indicated by an oval area confined entirely to the thoracic region. Deeply concealed beneath the diaphragm and costal arch, it is hidden in great measure by the stomach, to which it is intimately attached medially by the gastrosplenic ligament. The inferior extremity of the spleen lies upon, and is sometimes connected with the phrenocolic ligament, a fold of peritoneum connecting the splenic flexure of the colon with the diaphragm. The direction taken by an enlarging spleen is obliquely downward and mesial, since the phrenocolic ligament and splenic flexure hinder its enlargement directly downward. The spleen receives a very large portion of the blood from the celiac axis through the largest of its branches, the splenic artery, which runs a generally transverse course from right to left along the superior margin of the pancreas. The splenic vein is also the largest contributor of the portal circulation. This very large blood supply indicates undoubtedly a very active organ.

Histologic studies of the spleen show that the arteries and veins pass down through the trabeculae into the malpighian corpuscle and thence into a sinusoidal type of circulation. The debate has been continued for years as to whether the splenic circulation is "open" or "closed." Knisely[5] studied the splenic circulation in the living animal by means of transilluminated cold quartz bed and showed not only that the circulation was a closed one but that the venous capillaries presented open and closed phases. By watching single capillaries for hours at a time he observed that any empty venous capillary would suddenly develop a sphincter-like closure at one end, following which it became distended with blood. The fluid portion of the blood disappeared across the capillary membrane, leaving a highly concentrated mass of red cells to stagnate in a distended sinusoid. After a varying length of time there was a sudden opening of one of the sinusoids with the discharge of a mass of red blood cells into the venous circulation. Whipple[6] and his associates, however, favor a combined type of circulation in the mammalian spleen, that is, an open component in the vascular bed which permits the flooding of the splenic pulp space (not only of the fluid portion) with whole blood but with additional pathways available by means of which the extravascular detour of the pulp spaces may be short-circuited by direct communication between the arterioles and the venous sinuses. It is no doubt through this mechanism that the spleen functions as a blood reservoir. Barcroft[7] observed in members of his party traveling to the Peruvian Andes that sudden changes in blood volume and hemoglobin concentrations were noticeable as warmer climate was approached. This could not be accounted for by any other than by splenic sequestration and contraction, the latter being accomplished by smooth muscle in the trabeculae which divide the spleen into roughly pyramidal compartments 1 mm. in diameter with 3 trabeculae to each lobule. These contractions were later observed by the same author after exercise. Radiologic evidence of the state of flux of splenic size was furnished by an ingenious method by the use of metal rods attached to the spleen. However, Ebert and Stead[8] have more recently thrown some doubt on the mobilization of blood reserves in man by splenic contraction as a result of outpouring of epinephrine, exercise or hemorrhage. A lowered plasma volume, they think, seems to account for these changes in hemoglobin concentration.

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* This article is being published in two parts, of which this is the first.

This state of flux or ability to contract has proved embarrassing to many an internist who forgets this fact. An enlarged spleen may be palpated, only to contract after contact with the examining finger, and then the next examiner who is unable to palpate the slightly contracted spleen disagrees. Thus, another reason why the spleen is such a mysterious organ is that it plays hide-and-seek.

Physiologic Considerations

Our knowledge of splenic function is primarily indirect; that is, we observe what changes take place after the spleen is removed. The development of thin red blood cells (target cells) after splenectomy probably indicates that the mature red blood cells become thicker in their numerous but slow passages through the splenic sinusoids. Howell-Jolly bodies (nuclear remains) also increase after splenectomy, as do the white blood cells and platelets. These changes indicate a definite relation between the spleen and the bone marrow.

It is, therefore, reasonable to assume that the spleen makes red blood cells thicker and thus prepares them for eventual breakdown. No proof, however, exists that the spleen actually destroys red blood cells. Singer and Weisz,[9] by studying bile excretion of dogs after phenylhydrazine hemolysis, demonstrated that there was no decrease in bile output in the splenectomized animals, and conversely no increase in these animals with their spleens intact. Under the conditions of these experiments, therefore, the spleen does not appear to be a factor in the actual destruction of cells. The above experiment, however, does not account for the fact that an enlarged spleen may contain a great many more cells than the normal and may, therefore, by sequestration "slaughter" them. This theory of sequestration is the basis for the Doan adrenalin test and its value in the diagnosis of hypersplenism. Although their series is not statistically significant, Patek and Daland[10] have observed leukocytosis involving both myeloid and lymphoid cells following injection of adrenalin in normal individuals, patients with splenomegaly, and splenectomized humans. They came to the conclusion that since the changes observed were not greater in patients with spleens than in those after splenectomy, they could not be due to splenic contraction. Contrary to Barcroft's observations, in no case was there a significantly sustained change of concentration of the red blood cells, of the hematocrit, or in the amount of hemoglobin. It seems obvious that the process of blood destruction in the hyperplastic spleen cannot be explained by the process of phagocytosis alone, even though the severity of the clinical features usually corresponds with the quantity of formation of pseudofollicles, which represents a nodular form of reticulum-cell hyperplasia. This is well in accord with the observation that the clinical features can be masked by small accessory spleens which obviously do not possess more phagocytic activity than that of an average lymph node. This to my mind is in favor of the concept of the spleen as an endocrine organ mediating its influence on the bone marrow through a hormone and having its hypersplenic effect by maturation arrest of the marrow cells.

Recently, however, Johansen[11] has shown that the spleen, instead of secreting a hormone which inhibits the bone marrow, "sequestres" a substance which normally promotes the function of the bone marrow. In patients with hypersplenism the circulating serum contains a decreased amount of this factor, which soon returns to normal quantities after splenectomy. The spleen of these patients contains an excessive amount of this factor, because when pressed juice of the spleen was used as a nutrient medium in bone marrow cultures there was a 15 per cent increase in the activity of the marrow when compared to normal marrow cultures with serum used as a nutrient medium. "Since it has not been possible to demonstrate the presence of any substance inhibiting maturation, in my opinion this shows that the splenogenic inhibition of the bone marrow in certain clinical pictures is wholly or in part due to a pathologically increased resorption in the spleen of one or more substances which are normally present in the blood and which promote maturation in the bone marrow."

Fragmentation is probably the primary process by which erythrocytic breakdown is carried out within the body. By the continual wear and tear erythrocytes are gradually changed into small and often distorted cells, giving rise to anisocytes and poikilocytes. These are engulfed and destroyed by the reticuloendothelial cells which are so prominent in the spleen. The hemoglobin liberated by the process of destruction is broken down into globin which is probably used by the body in the formation of new hemoglobin, hemosiderin which is stored as a future source of iron, and bilirubin which normally passes through the liver cells by way of the bile passages.

Role in blood formation. The spleen arises embryologically from an outpocketing of the mesogastrium and is therefore almost entirely a mesenchymal organ. The histiocytes making up the reticuloendothelial system are mesenchymal cells and are the chief representatives in the adult of the primitive mesoderm. Throughout embryonic life the spleen is very active in producing red and white blood cells. It is active in leukopoiesis during most of fetal life after the third month, and particularly of lymphopoiesis which originates in the malpighian corpuscle. Monocytes are produced during the last 6 months. All these functions continue after birth except erythropoiesis, which is totally taken over by the bone marrow except in periods of unusual activity and stress as in the leukemias and severe anemias, in which the histiocytes of the splenic sinuses are capable of carrying out any type of hematopoiesis. Extramedullary hematopoiesis is, therefore, a splenic function of great importance and is by definition a necessary part of the syndrome known as "agnogenic myeloid metaplasia," in which the bone marrow becomes sclerosed and is unable to carry out its hematopoietic functions.

The spleen as an endocrine organ. The relationship of the spleen to the endocrine system was first shown by P. E. Smith[12] who noted in his hypophysectomized rats the decreased size of the spleen and its return to normal proportions if pituitary homotransplants were made. A case of hypertrophy of the spleen was produced by injection of pituitary extracts, which suggests a special spleen-stimulating factor of the anterior pituitary. This is in harmony with the demonstration that after splenectomy a pituitary hormone appears in the urine which can be identified as the gonadotropic factor.

Harrington et al[13] have recently demonstrated a circulating factor in the globulin fraction of the plasma of patients with thrombocytopenic purpura. This factor was capable of producing a sharp drop in platelet count of normal recipients and the appearance of purpuric manifestations. The factor persisted in some patients after splenectomy. Since the spleen has long been known to take part in immune body production, it is not far-fetched to think that it influences the production of auto-antibody formation. The use of ACTH in some of these cases brought about a rise in platelet count and failure of the globulin factor to produce thrombocytopenia in a normal recipient. The administration of ACTH in animal and human experiments results in atrophy of the thymus, spleen and lymph nodes. This may be a factor in the reduction of antibody production as well as its anti-anabolic effect, which reduces the synthesis of proteins from amino acids and produces a negative nitrogen balance.

The spleen as immune body generator. Although most of the reticuloendothelial cells are scattered throughout various tissues, a considerable portion aggregate to form a single organ, the spleen, which for quite some time has been regarded as being associated with the processes of resistance. The acute and chronic splenic swelling in infectious disease is an indication of a defense process. Splenectomy is also followed within 2 weeks by an increase of about 25 per cent in the weight of the hypophysis. This enlargement is referable not only to hyperplasia of the basophiles, but also to proliferation of the reticuloendothelial cells.

The only known fact is that the spleen plays a role in the mechanism of the control of the number of cells in the blood and that there exist primary splenic diseases, mostly with splenomegaly, which produce hemocytopenia and in rare cases polycythemia. The use of the term hypersplenism or hyposplenism in these cases should be called dyssplenism, since the contradiction exists that splenomegaly may cause hypo- or hypersplenism.

METHODS OF EXAMINATION

Palpation and percussion. Every physician has his own pet method for the palpation of this elusive organ. I will enumerate them and show my own favorite method.

First of all we must not lose sight of the fact that palpation of the spleen is not an innocuous procedure. Many instances of rupture have been reported. The most important factors, therefore, are to be gentle and to have a warm room and warm hands, patience and the patient's coöperation, since he must be taught to breathe with his diaphragm. Thus in its descent on deep inspiration the tip of the spleen will be felt by the examiner's fingers.

Bailey's method, which is the most commonly used by examiners, is to stand on the right side of the patient, who is supine. The left hand is placed over the lateral aspect of the costal margin, and while exerting a certain amount of even compression at the same time it draws the skin and subcutaneous tissues downwards and forward over the rib toward the expectant fingers of the right hand. This leaves a loose fold of skin under the costal margin. The right hand lies on the abdominal wall just below the margin of the ribs, with the finger-tips pointing toward the spleen. One keeps the hands still and does not expect to feel anything until near the end of inspiration. Just before the zenith of inspiration the hands are drawn slightly together and dip a mere trifle with the right fingertips. If the spleen is palpable the fingertips will be felt momentarily to ride over its edge. The spleen must be at least one third as big again as normal before it can be detected by clinical methods. In order to facilitate palpation of the spleen, Middleton advises that the patient's left fist be inserted beneath his left lower ribs. In case of uncertainty further examination can be attempted by the examiner changing his position and standing on the left side of the patient's head.

Using the sitting position and palpating with the patient lying on the right side are also favorite methods but are really too cumbersome to delineate the edge and notch of the spleen. My favorite method is to reverse the usual position of the hands, and by placing the left hand beneath the costal margin the hand follows more or less the natural curve of the rib cage. Not only that, but experience shows that the lateral edge of the little finger and ring finger are more sensitive to tactile stimuli than the mesial edge of the index and the middle fingers of the right hand which are constantly being used for grasping and more indelicate operations.

The chief inability to feel splenic enlargement lies perhaps in the fact that too much pressure is exerted on the abdominal wall, and contraction of the abdominal muscles prevents adequate differentiation. A further advantage of the method I prefer lies in the fact that the hypothenar eminence, which rests on the abdominal wall, provides a soft cushion which obviates muscular contraction easily brought about by the sharp edges of the index finger and middle finger if the right hand is used as the palpating hand.

Nonpalpable splenic enlargement can be demonstrated by percussion. Stoll's method and results are well documented.[14] The most distinctive change is upward extension of dullness on the chest wall. The patient should be supine and breathing quietly. Percussion is done with definite intensity from above downward along the midaxillary line. Splenic dullness normally includes an area from the ninth rib to the eleventh rib along this line. Decrease in the normal pulmonary resonance (if intrinsic lung pathology has been previously eliminated) above the ninth rib or down to the costal margin indicates splenic enlargement. The percussion of the spleen should be routine when a palpable mass is felt in the left upper quadrant, since a palpable spleen does not necessarily mean an enlarged spleen. It may be ptotic. Loss of normal resonance in the splenic area is often demonstrable a day or so before the spleen is felt.

Enlargements in the left hypochondrium which are usually mistaken for an enlarged spleen are renal tumors, and these can be differentiated by the absence of the definite tip and notch and by the fact that the palpating hand can usually be introduced between the mass and the rib cage. Pancreatic cysts may also offer some difficulty, but these also have no notch or definite tip, and mobility with respiration is limited. Large carcinomata of the stomach have been mistaken for the spleen, but the irregular presenting edge should be cause enough to suspect something besides splenic enlargement; furthermore, the enlargement is usually more mesial than the splenic enlargement usually is. If these criteria are fulfilled usually one can say that the spleen is enlarged, even if postmortem examination may prove us to be wrong, since we must not lose sight of the fact that the spleen contracts postmortem and a palpable spleen at the bedside may be a disappointment at the postmortem table. The most often confused "mass," however, is the depressed margin of the rib-cage. Definite identification of the rib-cage and the location of the twelfth rib should be made before attempting splenic palpation in order to avoid the mistake made in the case that follows:

Case 1. E. C., a white woman aged 32, was seen at home on January 15, 1952, for acute pain in the left flank. She had fallen in the bathtub and hit the edge of the tub with the left flank and lower left thorax. Examination at this time revealed acute point tenderness over the eleventh and the twelfth ribs. Her blood pressure was normal, and the patient did not appear to be in great distress. X-ray films taken on January 15, 1952 revealed fractures of eleventh and twelfth ribs on the left. She was admitted to Georgetown University Hospital on January 19 because she had a shaking chill with slight hemoptysis followed by a fever of 104° F. Examination on admission revealed multiple ecchymoses over the area of injury. The abdomen was tender, and there was definite splinting of the left upper quadrant. The blood pressure was 90/60, and the pulse rate 85. X-ray films of the chest were normal. There was no mass felt in the region of the spleen, and the left diaphragm moved well with respiration. An intravenous pyelogram was interpreted as normal. On these films, taken January 23, a soft-tissue mass was noticed in the area of the spleen. A delayed rupture of the spleen was naturally suspected and the surgical consultation reads as follows: "Spleen is definitely palpable and tender. In view of course believe she has either hematoma of spleen or thrombophlebitis of splenic vein. Splenectomy is indicated. Will schedule in a.m."

The surgeon's operative note reads: "The abdomen was opened through a left rectus incision. There was no free fluid or evidence of blood present. Colon and stomach were brought down, revealing a normal-sized spleen, entirely normal in character lying in the usual position. It was apparent that the previously thought mass was a depressed portion of the costal margin over which there was interstitial hematoma and edema. A complete laparotomy failed to reveal any intra-abdominal cause for pain and fever."

This case illustrates the difficulties one may encounter in the palpation of the spleen which was made difficult by the splinting and tenderness in the left upper quadrant. The overlying hematoma was no doubt responsible for the mistake. The degree of fever was too high for that usually seen in delayed rupture due to trauma. There was no referred pain to the shoulder (Kehr's sign). This patient was seen by at least 5 physicians, all of whom agreed on the palpability of the spleen.

Roentgenologic methods.[15] According to Gray's Anatomy the spleen in the adult should be about 12 cm. in length, 7 cm. in width, and from 3 to 4 cm. in thickness. The shadow of the spleen and kidney, after a "flat plate" of the abdominal contents, should be about the same size. It is more often than not a pleasant surprise how well outlined these organs are on the ordinary K. U. B. film. If the complete contours of the spleen and kidney can be seen, a spleen more than 85 per cent of the size of the kidney may be enlarged. The reason for arbitrarily using 85 per cent in the comparison is that the magnification of the kidney shadow due to the spreading of the rays is greater than that of the splenic shadow in the posterior-anterior projection. The spleen, then, is probably enlarged if it is more than 6 cm. in width and more than 85 per cent of the length of the kidney shadow.

Pneumoperitoneum has been used to demonstrate splenic enlargement, but I think that this procedure has no place in the average clinician's armamentarium. The use of thorium dioxide (Thorotrast) in the demonstration of hepatosplenomegaly was used extensively by Yater[16] for many years, and in his hands no ill effect was noticed. Its greatest value would be in the diagnosis of metastatic malignancy or abscess of the liver or spleen in which the actual outline of the metastatic lesions or abscess cavity can be made out.

The incidence of splenic enlargement varies of course with the zone and area where splenic surveys are made; in an endemic malarious zone it may be as high as 75 per cent. Few surveys have been made in the North Temperate Zone. Lipp et al[17] found an incidence of 5.6 per cent in 2,274 consecutive patients living in the Temperate Zone. In this large group an exhaustive clinical search did not uncover any adequate cause for the splenic enlargement in 41 per cent. Recognized or unrecognized infections of youth may explain the splenic enlargement in many of these cases, although splenic aspiration if done routinely on these patients would have, I believe, uncovered many more definite diagnoses.

The following case illustrates the relative benignity of a palpable spleen acquired probably in childhood and with greater enlargement noted after a bout of infectious mononucleosis. After the acute phase of this disease was over the spleen returned to the "normal" enlargement noted before the infection.

Case 2. A 17-year-old white man was first seen at the Yater Clinic for a urethral discharge which was diagnosed as a nonspecific urethritis. His past history revealed mumps, measles, pertussis, and pneumonia (at age 7). His review of systems was essentially normal. His physical examination was negative except for definite enlargement of the spleen. At this time his white blood cell count was 9,700: segmented, 68; lymphocytes, 20; bands, 2; eosinophiles, 2; basophiles, 1; monocytes, 7. The sedimentation rate was 10 mm. in 1 hour by the Wintrobe method. Since there were no atypical lymphocytes present and the heterophile agglutination test and all other agglutination tests were negative, this was considered to be a case in which the spleen was enlarged because of childhood illnesses enumerated above, any of which can be associated with splenic enlargement. No further investigations were made because the boy was apparently in the best of health. In November 1949, following a pharyngitis, he had fever and malaise for 2 days. His spleen appeared to be larger than before. He had enlarged posterior cervical and inguinal lymphnodes, which were tender. His white count at this time was 10,600: segmented forms, 26; lymphocytes, 62; bands, 6; monocytes, 6. Many atypical lymphocytes were noted on the peripheral smear. Heterophile agglutination test was positive, 1:896. In December the count was 7,500, with segments, 26; lymphocytes, 66; bands, 2; and monocytes, 4. The heterophile had dropped to 1:448. The spleen was still quite large, and the only complaint was that he tired easily. By January his count had returned to normal and the heterophile was negative. When he was last examined on January 18, 1951, his spleen was still palpable and he appeared to be in excellent health.

With these figures quoted in mind it should not alarm the physician if a spleen is palpable. The enlargement may have nothing to do with the patient's present symptoms but may merely mean a recalcitrant organ which has been injured and refuses to return to its normal complacency. It is in these cases, however, that we must consider the less obvious causes of splenomegaly with which this paper is primarily concerned.

A palpable spleen does not necessarily mean enlargement, since in the visceroptotic type of individual the spleen may be palpable though normal in size, and if it is loosened from its moorings it may wander all over the abdomen and be felt as a mass even in the pelvis.

The following case is remarkable because of the long duration of severe hypertension and the development of a wandering spleen after sympathectomy from which he has no subjective or clinical effects.

Case 3. Mr. J. C. S. was seen for the first time in April, 1939 with hypertension and shortness of breath. The hypertension ranged from 240/155 to 210/120. At that time he had no cardiac enlargement. An electrocardiogram was essentially normal. Kidney function was good. He was placed on thiocyanate with little relief. In August of 1940 a lumbar sympathectomy on the left side was done. This was followed by an abscess in the operative wound which drained for 2 months. The blood pressure did not change appreciably after operation and operation on the other side was refused. He has been maintained on thiocyanate off and on for 13 years. In August of 1943 his spleen first became palpable. At this time there was no liver enlargement. It was felt at that time that this was probably a ptotic spleen, the result of the sympathectomy and the infection which followed the procedure. The various examiners who have seen him at the Clinic on different occasions are able to feel the spleen at times as far as 4 fingerbreadths beneath the left costal margin, while others are not able to feel it on the next visit. It is easily movable and can be displaced 3 to 4 inches on pressure. There has been no secondary hypersplenic effect. His last blood count on January 8, 1952 was 103 per cent or 15.5 Gm. and the white blood cell count 6,600 with a normal differential. The liver is now enlarged 3 fingerbreadths beneath the costal margin. The patient has had paroxysmal nocturnal dyspnea for 5 to 6 years without relief from digitalis. He has developed angina pectoris which has not responded too well to the use of Peritrate.

Symptoms Due to Splenomegaly

The innervation of the spleen is important from the point of view of symptom production. Although the spleen is insensible to pain stimuli, pain is often referred to this region. It is not uncommon, for example, to feel twinges of pain in this area at the time of violent exercise.

The sympathetic nerves of the spleen arise from the third thoracic to the tenth thoracic segments. The vascular innervation is from the third to the twelfth thoracic and the first to the fourth lumbar through the semilunar ganglion. Fibers from the vagus also enter the spleen. When enlargement takes place through the attachment to the outer part of the diaphragm the local intercostal nerves are involved. The constant irritation of the segments of spinal cord with which the nerves are associated due to splenic enlargement causes the other nerves from these regions to be hypersensitive. Thus the intercostal nerves of the region register pain referred to skin of the lower left chest. Through the phrenic fibers the cervical cord becomes sensitized and the skin of the left shoulder and external region shows tender points.

Through the vagus pathways the nucleus of the vagus may become hypersensitive as well as the associated nucleus of the fifth. Dizziness and giddiness may be symptoms, and even nausea, vomiting, headaches and cough.

Referred pain to the left shoulder may be present (Kehr's sign) either as a result of diaphragmatic irritation from perisplenitis or rupture of the spleen. It is a most valuable sign and should always be looked for in cases of abdominal injury. To elicit Saegesser's sign deep finger-point pressure is made between the sternomastoid and the scalenus medius on the left side. This, Saegesser calls the splenic point, and in cases of ruptured spleen deep pressure causes violent pain; this may occur even in cases of intracapsular hemorrhage.

Unusual Conditions

ACCESSORY SPLEEN

In considering the spleen as a single organ it is well to remember that about 10 per cent of people have accessory spleens of varying sizes. This takes on considerable importance in cases of hemolytic anemia and thrombocytopenic purpura. If an accessory spleen is present in these patients the clinical course may go unchanged. Adami and Nicholls[18] found accessory spleens in 11 per cent of autopsies. Their locations are most frequent as follows: (1) the hilus of the spleen, (2) the gastrosplenic ligament, (3) the splenocolic ligament, (4) the pancreatic-splenic ligament, (5) the great omentum, (6) along the blood vessels of the spleen, and (7) in the gastrohepatic omentum. Nevertheless, they may be found anywhere in the abdominal cavity, and a third testicle has often turned out to be an accessory spleen in the scrotum. They have been found attached to the transverse colon and splenic flexure simulating tumors of the bowel.

Most authors favor the developmental origin of these misplaced tumors, but others like Kaufman[19] favor the traumatic theory with implantation of splenic tissue and regeneration after trauma. Clinically, accessory spleens may explain some obscure pains and abdominal masses.

They may twist on their pedicles and in the female may present themselves as masses in the left adnexa.

It is well known that "splenules" may be implanted in the abdominal cavity after traumatic rupture. This condition called splenosis is quite different, however, from accessory spleens, since they seldom grow very large or have quite the typical splenic histologic architecture.

In cases in which splenectomy is indicated the incidence of accessory spleens often increases tremendously, as this tissue may be dormant in the normal, but when stimulated by diseases such as thrombocytopenic purpura, hemolytic anemia and hypersplenism, it grows into proportions that are easily recognizable during surgery.

Curtis and Movitz[20] in a series of 174 consecutive splenectomies for various splenic diseases found that 56 or 31.4 per cent presented accessory spleens. The incidence in the first decade of life was 50 per cent and decreased to 39.1 per cent in the second decade. The decreasing incidence in advancing age is presumed to occur normally by gradual involution and atrophy. The onset of pathology in splenic tissue makes the "accessories" enlarge rather than involute.

SPLENIC ATROPHY—HYPOSPLENISM

The concept of hyposplenism has come into the recent literature as a result of hematologic studies made on a number of patients who underwent splenectomy, not because of splenic disease but owing to rupture of the spleen caused by violent trauma. Splenectomy in healthy men could be an indicator of the characteristics of the state of "pure" splenic hypofunction.

The clinical complications which immediately followed splenectomy included a high frequency of pyogenic manifestations in the subcutaneous tissues at the site of hypodermoclysis, bronchopulmonary infections, and postoperative pleurisy. Pontoni[21] cites a series of 19 patients, half of whom suffered chronic infection of the respiratory apparatus, mostly of the bronchi, or caught frequent colds. The hypothesis of a particular infectious morbidity of the respiratory tract seems likely because of an obvious alteration of the reticular endothelial and lymphatic immunologic functions. Pontoni believes that in most of his cases there was "less readiness of adaptation to functional reactive performances to a sudden demand."

This brings forth the same relationship found by Ungar[2] of the splenic relationship in the adaptation to a stress reaction. This phenomenon is not explained on the old theory of the lack of the amount of blood in the splenic reservoir which is added to the circulation in emergency organic performances, but by a defect of the spleen-liver regulative system for the oxidative metabolism of the body tissues.

Such a function of the spleen as a pre-organ of the liver seems to be a fundamental and primary function of the organ. The other worthwhile observation made by this author was the finding of a slowed and deficient body development, although increase in appetite and a rise in the basal metabolic rate were observed.

The concept of hyposplenism is not new and has been observed in cases of splenic atrophy and sickle-cell anemia, in which the spleen becomes small and apparently functionless. Future investigations will no doubt shed light on this interesting subject, and a classification of the hyposplenisms will be forthcoming.

SPONTANEOUS AND DELAYED RUPTURE OF THE SPLEEN

There is not a more catastrophic intra-abdominal condition than the rupture of the spleen, because, if it passes unrecognized (and it still occurs far too frequently), the mortality is almost certain to be 100 per cent.

The increased incidence of splenomegaly in this country may be said to be a pathologic complication of World War II and the police action in Korea. The finding of splenomegaly should make alert clinicians aware that the potentialities for spontaneous and traumatic rupture of the spleen are great. The enlarged spleen is more vulnerable to trauma with resulting rupture and hemorrhage because it is more friable and fragile.

Spontaneous rupture of the normal spleen has not been reported. However, spontaneous rupture in infectious mononucleosis, malaria, typhoid fever and subacute bacterial endocarditis are rare but usually fatal. Prior to 1895 more than 60 cases of apparent spontaneous rupture of the malarial spleen appeared in the literature. None of the patients was operated upon, the diagnosis being made at autopsy. Best and Schmid[22] in a review of the literature find that from 1895 until 1945, 47 cases have been reported, with 50 per cent mortality.

The mortality figure is the same for the first 25 as for the last 25 years recorded, proving that the awareness of this catastrophe has not improved the mortality figures in the last 25 years. They report 3 of their own cases and state their belief that the apparent spontaneous rupture of the spleen is probably associated with some form of "unappreciated or unrecognized external trauma or internal strain."

Spontaneous rupture of the spleen may occur as a complication of splenic infarct in the course of subacute bacterial endocarditis. Eleven cases have been reported in the literature. In none of these was the diagnosis made antemortem. Wolfson,[23] writing in 1944, stated that "operation is contraindicated even if the diagnosis is made, because of the grave prognosis of the underlying disease." I believe that he would change his mind today because of the better prognosis in this disease with the use of the new and more powerful antibiotic therapy.

Delayed splenic rupture, although rare in peacetime, takes on a new significance in this age of war and atomic bombs because of its potentially great increase.

Zabinski and Harkins[24] in 1943 analyzed 66 reported cases of traumatic subcapsular rupture of the spleen with delayed hemorrhage, adding 4 of their own. Falls and traffic accidents are the most common causes. It is most common in the third decade of life when man is most active and adventurous. About 50 per cent of the secondary ruptures occur after intervals of less than 7 days, while in an additional 25 per cent the latent period ends in the second week. Fractured ribs on the left side occur in about 10 per cent of the cases. Kehr's sign (pain in the left shoulder due to irritation of the phrenic nerve) is present in about 28 per cent or more of the cases. Other diagnostic signs are similar to those occurring in any type of splenic rupture, such as sudden collapse or shock, rapid or increasing pulse rate, progressive anemia, white blood cell count from 12,000 to 20,000, decrease or absence of fever over 99° F., pain and tenderness, dullness and rigidity in the left upper quadrant, and in some instances signs of free fluid in the peritoneal cavity. Ballance's sign is said to be pathognomonic of splenic rupture. There is a dull note in both flanks, but on the right side it can be made to shift, whereas on the left it is constant. The interpretation of the sign is that there is blood in the peritoneal cavity, but the blood in the neighborhood of the lacerated spleen has coagulated. This sign, however, is quite rarely obtained even though there are innumerable references to it in the literature. Saegesser's sign is obtained by deep finger-point pressure made between the sternomastoid and the scalenus medius on the left side. This Saegesser calls the splenic point, and in cases of ruptured spleen the pressure causes violent pain, even in cases of intracapsular hemorrhage

The syndrome of delayed rupture is especially insidious and treacherous because of the almost symptom-free latent period. Delay of serious bleeding may be explained in 3 ways: The great omentum may shut off that portion of the general peritoneal cavity in the immediate vicinity of the spleen. A bloody coagulum temporarily seals the rent. A subcapsular hematoma may form and later burst. It is probable that each of these factors, at one time or another, temporarily arrests serious hemorrhage.

Without operation the mortality ranges from 77 to 100 per cent. If the hemorrhage is subcapsular and contained within the capsule, indentation of the stomach and downward deflection of the splenic flexure of the colon are almost diagnostic. In these cases it is not uncommon for recovery to take place without operation. The patient should be kept in bed (when laceration is suspected) and under close observation. At the first sign of secondary hemorrhage splenectomy should be performed.

In cases of ruptured viscus the elements of shock and hemorrhage, even though present, are not so dominant, whereas the signs of peritoneal irritation are more prominent. Kehr's, Ballance's and Saegesser's signs should be of help. Paracentesis to obtain positive evidence of intraperitoneal bleeding has been advocated by Wright and Pigot,[25] but a laparotomy is preferable when there is doubt.

Case 4. F. G., a 48-year-old white man, was admitted to Georgetown University Hospital on August 30, 1947 in a state of shock. He had been a chronic alcoholic for 20 years. He went on "binges" about 3 times a month, drinking about a quart a day for a week at a time and eating little if at all during this time. On August 23, 1947 he had ended his last "binge" when he awakened with severe epigastric pain. He reported to the emergency room in a hospital in Troy, N. J., where he was given a sedative and an antispasmodic and sent home. He was well until this morning (a week after the original pain), when on arising he noticed moderately severe epigastric pain which came on rather suddenly but did not prevent him from driving from Troy, N. J. to Washington, D. C. He consulted a doctor on the way who told him he had severe coronary artery disease and gave him nitroglycerin under the tongue with some relief. On admission "he seemed to be in extremis" (intern's note). "He was ashen gray, sweating profusely, and retching violently. The pulse was weak and thready." The blood pressure was 90/60, the pulse rate 125, the temperature 99° F., and the respiratory rate 24 per minute. Oxygen was administered, and he rallied enough to give the above story. Examination of the abdomen revealed an almost boardlike rigidity. There was moderate tenderness about 3 inches to the left of the umbilicus. On percussion the liver was found to be about 6 cm. below the right costal margin. A flat plate of the abdomen on August 31, 1947 failed to reveal free air under the diaphragm. A chest film showed cloudiness and an opacity at the left base with obliteration of the left costophrenic angle. Reflex ileus was manifested by distended loops of bowel. An electrocardiogram showed sinus tachycardia but was otherwise within normal limits. The hemoglobin was 9 Gm., the hematocrit 19 mm., and the white blood cell count 13,700.

One thousand c.c. of whole blood was given within the next 24 hours, and the hematocrit rose to 43.

Ballance's sign was definitely positive without being called by name. "Flat note on percussion on left upper quadrant and left flank and extending anteriorly to midclavicular line. This flat note changes but slightly when patient is turned on right side." His course was stormy but with little fever. He had increasing evidence of a delayed rupture of the spleen: A friction rub was heard in the left upper quadrant, and he complained of left shoulder pain. Yet the resident's note attests to his incredulity that this was actually the case. "The diagnosis of splenic rupture has been suggested but I do not see much evidence for this. There is no history of trauma." A blue discoloration at the flanks was noted (Cullen's sign).

X-ray examination of the gastrointestinal tract on October 2, 1947 "shows the stomach to fill well and shows a marked displacement medially by a large, poorly defined, homogeneous impression." Examination of the colon by means of a barium enema "showed the entire colon to fill well. There is evidence of a displacement of the splenic flexure downward by the previously described soft tissue mass."

All these signs are X-ray evidences of splenic mass. The patient strangely enough was not operated on because he refused operation after he began to feel well, and the mass and tenderness subsided. He walked out of the hospital.

This case is an example of delayed rupture of the spleen. It brings to light the little familiarity with the syndrome: that rupture may occur sometime after the original tear, that trauma is not necessary for rupture of a spleen which is already diseased, that Ballance's sign is pathognomonic of a ruptured spleen; that medial displacement of stomach and downward displacement of splenic flexure are pathognomonic roentgen signs of a splenic mass, and that, although the mortality of delayed rupture of the spleen without operation is almost 100 per cent, there are some lucky individuals who do not die.

(*To be continued*)

President's Page

THE DOCTOR AND POLITICS

Election time will soon be here. Great issues may be decided on November 4. Unfortunately, we residents of the District of Columbia will have no voice in the decision. Therefore, my brief remarks may not seem to have a point for the members of our Society. Suppose, however, you were one of the 150,000 or more physicians who do have the privilege of voting. What would you do? I sincerely hope you would vote. And how would you vote? That would be entirely up to you, but I trust that you would vote on issues rather than just for persons. There is too much of emotionalism in politics. The jovial, silver-tongued orator is apt to gather more votes than the less personally attractive and plain speaker.

The issues are not always clear-cut, and the candidates of our two major parties may have a hard time drawing the lines of separation. Preëlection promises are not always fulfillable, but they carry great weight with voters. The past policies and records of the parties and their elected officers must be scrutinized, as well as those of the candidates. Sad though it be, many voters have the itching palm, and Government handouts attract their support. But there must be a day of reckoning when the pork barrel is empty. Then it will be too late to retrace our steps on the road to paternalism and disaster.

How much should doctors talk to patients about political matters? I should say, precious little, when it comes to such matters, unless the patient asks for information. My reason is that the public on the whole believes that our interest is a selfish one. Our deeds must speak for themselves. If we treat the public right both in medical and in business matters, and if we urge our patients and friends to use Group Hospitalization and Medical Service, we have done our job. That does not mean that there should be no dissemination of facts concerning the evils of socialized or Government-controlled medicine, but the more we can get laymen to do it, the better.

The question was asked at an assembly of editors of state medical journals in Chicago last fall about how much a state medical journal should engage in politics. The large majority thought it proper to discuss issues dispassionately and without reference to political parties or specific candidates. They believed that all such editorials should be cleared through proper channels of the Society. I, for one, agreed with this point of view.

From the foregoing remarks I hope you won't conclude that I think we should sit idly by and see our house burned down. Those who know me know that I am a fighter, a fact that has not always been to my personal advantage. I have learned by experience, however, that there is more than one way to "skin a cat." The thought I want to advance is simply this, that we as individuals should be diplomatic and outwardly unemotional if we are called upon to express political views and that the mouthpiece of medicine should be the Society and its duly elected officers and committees.

Wallace M. Yater

Editorials

ONE FEATHER IN OUR CAP

A Red Feather, that is, and with your help we'll make it two.

I'm referring, of course, to the Community Chest Campaign which opened on October 6, and the Red Feather in our cap is the one placed there by Dr. W. Ross Morris and his team who brought the 1952 drive among the doctors to a successful close at 114 per cent of our quota. Last year was the first year that professional groups solicited their own members; therefore our record as of now is perfect—one year and one Red Feather. The ball has now been thrown to me and with your whole-hearted support and contributions we'll put the second Feather in our cap.

"Nothing succeeds like success." While the Chest Campaign last year as a whole did not quite attain its goal, it came very close to doing so, and most of the groups did make their quotas, including the lawyers, doctors and dentists. The Community Chest Campaign in this city is going to be successful when each and every person accepts his or her responsibility, for a large success is made up of numerous small ones. As a professional group we can and must set a pattern for success. We want the other groups to say of us, "If the doctors can do it every year, we can too."

The 1953 campaign goal is $4,150,000. This is $100,000 above last year's goal, due not only to inflation but to increased demands being made on the Red Feather agencies for services they render the community and the armed forces. The quota for the Professional Group (lawyers, doctors and dentists) is $158,433, of which the doctors are asked to subscribe $37,850. This is $1,950 more than we pledged last year. A little farther on, if you will continue reading, I'm going to tell you how we can raise that extra $1,950.

First I want to list briefly the 16 basic services in this community which our $37,850 will enable to carry on, because I do not want you to lose sight of our objective.

Adoption Services
Hospital Care*
Clinic Care
Care for the Aged
Care for the Homeless and Neglected Children
Day Care for Children of Working Mothers
Care for Unmarried Mothers
Mental Health Services
Nursing Care in the Home
Emergency Direct Relief
Marriage Counseling
Counseling on Personal and Family Problems
Health Education
Rehabilitation of the Physically Handicapped
Recreation Services for Youth Development
USO-UDF Services to the Armed Forces

Five of these basic services, about one third, are entirely medical and health projects; the rest, almost without exception, are close kin to the field of medicine. To the agencies which these services represent many of you are now giving generously of your time and talents both as physicians and citizens. We are proud of that record. But even the best medicine will not avail if we cannot offer these unfortunates food, shelter and care, counsel and guidance, and these services require money, and a lot of it—from all of us.

Last year Dr. Morris called the 1952 campaign "big business." Any four-million dollar project

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* Community Chest funds help purchase hospital care for eligible persons at 14 hospitals and 2 health centers in Washington, and nearby Maryland and Virginia.

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

is big business, and what I should like to emphasize this year is that big business has to be budgeted for. Some people shy away from such terms as capitalism, big business and million-dollar drives, but I confess I like doing things on a big scale. This is a big country we are living in and I am proud of the big things our country has always done. Washington is a big city, and for us to go back to 102 individual pass-the-hat solicitations to continue these needed community services would be like going back to horse-and-buggy medicine.

Most of you who budgeted for this year's contribution according to your income will find that the extra amount needed to make this year's drive a success is right there in your checking account. During the past year the Community Chest and the medical profession lost one of its most generous supporters. In memory of that public-spirited citizen I am going to ask that we make up that lost contribution to the Chest as well as increase our support by $1,950. There are two ways of doing this. The first is to increase your own pledge. There is an alternative way just as sound; the Community Chest people tell me that only 52 per cent of our profession carried the full load last year as compared to 84 per cent of the lawyers and 62 per cent of the dentists. Therefore, do pledge at least the same amount that you did last year and then urge one additional physician who did not contribute last year to do so this year.

General Chairman Blunck is pleading for every one to do his or her "fair share." What is a fair share? The following figures have been set up by the Community Chest on the basis of experience and need in other cities of comparable size to Washington as a yardstick for fair and generous giving:

Income	$ 5,000 to $10,000	1 per cent
Income	10,000 to 15,000	1½ per cent
Income	15,000 to 20,000	2 per cent
Income	over 20,000	2½ per cent and up

I am reminded of Raspberry (that was his real name) who answered his prospective son-in-law's rap at the door with this cordial greeting, "Come right in, Sam; YOU don't have to knock." Community Chest giving is a matter of right education. I hope the day will come when it will only be necessary to name area chairmen, and you doctors will seek out the chairman for your area and say, "Here's my check, George; you don't have to ASK."

But in the meantime we are going to ask each and every one of you to give, and I hope your response will be generous. If our membership participation even approximates 100 per cent, with each member giving his or her "fair share," there will be no question of my team placing a second Red Feather in our cap for 1953.

RAYMOND T. HOLDEN, M.D.
Chairman, Physicians Group, 1953
Red Feather Campaign

SURVEY OF MEDICAL CARE FOR THE INDIGENT

In the past few months quietly and assiduously a survey of the medical and hospital facilities and services available in the District of Columbia for the indigent and medically indigent patient has been carried on. The survey stemmed from a remark incorporated in the District of Columbia Appropriation Bill for the fiscal year 1951 which stated:

"The committee* is not at all pleased with the present program of the Health Department for the care of the indigent sick of the District. It is of the opinion that the Department should exercise more control and supervision of selection of those receiving these benefits and believes that the Health Officer and the District Commissioners should make a thorough study of this situation in order that the entire program can be more closely integrated and more efficient and economical services rendered to the needy of the District of Columbia."

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* House Committee on Appropriations, 81st Congress, 2nd Session.

The problem of adequacy of medical care furnished to the indigent in the District of Columbia has been of considerable concern to many people and organizations as well as of paramount concern to the District of Columbia Health Department. The problem was presented to the Advisory Committee to the Director of Public Health on Medical Care to the Indigent in the District of Columbia.

This Advisory Committee consists of representatives from Region III of the U. S. Public Health Service, District of Columbia Medical Society, American Association of Medical Social Workers, United Community Services, District of Columbia Board of Public Welfare, as well as representatives from some of the local hospitals and nursing associations.

The advice and counsel of the Regional Medical Director, Region III of the U. S. Public Health Service, a member of the Advisory Committee, was solicited because the District of Columbia is included within Region III, and particularly on account of the interest that the Public Health Service has in the programs of home care, rehabilitation, hospital construction and cancer in the District. After several meetings, the Advisory Committee decided to conduct a Survey of Medical Care for the Indigent and Related Services, and to request technical assistance from Region III of the Public Health Service. District Commissioner Donohue formally requested the assistance of the Surgeon General of the Public Health Service, and upon receiving a favorable answer the Advisory Committee proceeded to organize for the Survey.

Mr. William Leahy, President of the District of Columbia Tuberculosis Association and Chairman of the Selective Service for the District of Columbia, was requested to accept the Chairmanship of the General Survey Committee. Upon his acceptance the Health Advisory Committee was expanded to form a general Survey Committee. Appointees were selected for their qualifications as representative citizens of the community interested in the problem and capable of effectuating the Survey. The most important facets of the community are represented on this General Survey Committee.

To facilitate administration an Executive Committee of the General Survey Committee was appointed. The membership of the Executive Committee consists of Mr. Leahy, Chairman; Edward K. Funkhouser, Executive Secretary of the District of Columbia Tuberculosis Association; Theodore Wiprud, Secretary of the District of Columbia Medical Society; Isadore Seeman, Executive Secretary of the Health Section of United Community Services; and Joseph W. Leverenz, Executive Director of the District of Columbia Division of the American Cancer Society. Two other committees, a Finance Committee and a Publicity Committee, have been appointed.

The Technical Committees have been appointed to encompass all facets of the Survey. The surveyor or field worker for the Technical Committee will bring to the Technical Committee the facts and findings which it decides are needed. The Technical Committee will be responsible for final recommendations and the report to the Technical Administrative Committee.

The objective of the Survey is a complete study of all facets of medical care for the indigents in the District of Columbia. Medical care for the indigents is almost a complete cross-section of medical care programs of the community. Hence a survey of medical care for the indigent must encompass more than that provided by the official health and welfare agencies, and should include the care furnished by private and voluntary agencies. Since each has its impinging factor, all should be weighed in the analysis of indigent medical care in its entirety.

The Survey will endeavor to reach conclusions, not resting solely on opinion but verifiable by facts. The Advisory Committee hopes to find the problem susceptible of scientific analysis. To accomplish these objectives a staff of field workers was organized in the 15 following facets:

Mental Illness
Tuberculosis Services
Chronic Disease
Rehabilitation
Home Care
Maternal and Child Welfare Services
Nursing Services
Venereal Disease
Dental Care
Medical Care, Official and Non-official Agencies
Medical Care and Public Health
Medical Care by Voluntary Agencies
Hospitals and Clinics
Medical Social Service
Communicable Disease

Much of the field work is being done by the staff of Region III on a part-time basis and in addition to their other duties. Some assistance has been rendered by other divisions of the Public Health Service.

The field work has practically been completed, and reports are in the process of preparation. It is anticipated that the Survey will be concluded by the early part of 1953.

E. T. Thompson, M.D.
Director, District of Columbia
Survey of Medical Care for the Indigent
and Related Services

THE GASTRIC ULCER

One of the most controversial subjects in the field of gastroenterology is the diagnosis and treatment of gastric ulcer. The diagnosis of a gastric lesion is often simply a matter of employing a routine plan of examination, but establishing the pathogenesis of the lesion is not simple. The importance, of course, rests in the accepted statement that gastric ulcers may originate or degenerate into carcinoma. It has been claimed by various competent writers that somewhere between 10 and 50 per cent of proven carcinoma of the stomach have an intimate relationship, if not origin, in ulcer. This debate has been thrown back and forth across the Atlantic for decades until the compromise of about 15 per cent has been reached.

When we discuss gastric ulcer, we must recognize its relationship to carcinoma. The clinician and the roentgenologist find it difficult or impossible to differentiate in many instances and even the pathologist may find diverse opinions when identical sections of an ulcer are submitted to his colleagues.

The statistics of the surgery of carcinoma are gloomy to peruse. In a recent study of 2,891 cases in Los Angeles, only 10 per cent admitted to hospitals had a resection for cure, and the overall 5-year survival rate was only 1.4 per cent. A more favorable rate is reported from some of our larger clinics. The 5-year cures of gastric (benign) ulcer is well over 75 per cent.

Upon the diagnosis much of the treatment must be predicated. Welch, in a recent review of abdominal surgery, presented some interesting facts. In a 4-year period at the Mayo Clinic 13 per cent of patients operated upon for benign ulcer had carcinoma and yet no signs or symptoms were present to permit a differential diagnosis. He writes that Graham analyzed 246 cytologic smears of gastric washings, and 16 per cent were believed by the radiologist to have a benign ulcer but proved after resection to be malignant.

Neither the clinician nor the radiologist is able to differentiate between the benign and malignant gastric ulcer, except in a general way. Of course, time will tell, but only too late.

How should a gastric ulcer be treated? Every possible means should be taken to establish the presence of a pathological lesion. To ascertain the nature of this lesion, cytologic examination, gastroscopic examinations and biopsy and repeated X-ray examinations are mandatory. If the condition remains unchanged in 4 to 6 weeks, there is no justification for continuation of medical treatment. Should both clinical and radiologic evidence indicate amelioration of the condition, or even an apparent cure, the patient should be kept under continual observation for several months. Lampert, Waugh and Dockerty of the Mayo Clinic note 3 cases in which satisfactory healing and disappearance of the ulcer later proved to be carcinomatous by gastroscopic examination.

An exploratory operation is clearly indicated in those cases in which the symptoms or signs persist after adequate treatment over a period of a few weeks or when the cytologic or X-ray evidence is strongly suggestive of carcinoma. The low surgical mortality in exploration and resection is a strong argument as a substitute for expectant treatment.

It has long been recognized and repeatedly emphasized that the close relation between gastric ulcer and gastric carcinoma must always be reckoned with in the treatment of ulcer. And it is this ill-defined differentiation that permits a restatement of these observations. The zone between a benign and malignant lesion may be considered a no man's land in gastroenterology, but it would be far more appropriate to call it every man's land.

C. S. W.

NATIONAL DIABETES DETECTION WEEK

National Diabetes Detection Week, sponsored by the American Diabetes Association, will be held November 16 through November 22.

Each year more unknown diabetics are discovered by means of this annual drive, but the numbers are still less than we have been led to expect by statistical data. For every 1 of the million known diabetics, it is believed that there is one unknown. Why the great number of unknowns? The answer must lie in the care and frequency with which we search.

There is a great need for more education in this direction among the general public. In the drives for detection of tuberculosis the public is urged not to wait for symptoms to develop before having a "chest X-ray," but to have it routinely. They are told not to wait for symptoms of cancer to develop, but to be examined routinely. The facts that early tuberculosis and cancer may exist without symptoms, that even advanced cases of cancer may be symptom-free, are brought before the public repeatedly. We physicians are aware that diabetes also may be present for a considerable time without symptoms and we need to make the public more cognizant of this fact.

If we can, through National Diabetes Detection Week and in our own offices, put across the fact that many times diabetes is not discovered until it is moderately advanced or until the diabetic is in coma, perhaps we can establish the need of routine examination for diabetes.

Of necessity, in mass detection procedures, the most practical methods are not the most exhaustive, but they serve a definite purpose in screening out some early cases. In the physicians' offices a blood sugar determination and urinalysis taken 2 hours after a heavy starch meal would produce more accurate results. The purposes of this drive can be supplemented and strengthened by year-round routine examinations of this sort in the offices of private doctors.

National Diabetes Detection Week is a worthwhile project, contributing to the elevation of the health standards of the Nation. Let us all give it our support and encouragement.

Samuel Benjamin, M.D.
President, Diabetes Association of the District of Columbia

In and Out of Focus

BY THE OBSERVER

Organization Madness At the annual dinner of the Society of Registered X-ray Technicians of Washington, May 10, 1952, your Observer, who had been invited to speak on that occasion, addressed the group on the benefits of organization, a topic which had been suggested to him several months before. In mulling over this topic, he came up with some observations which he entitled "The Professional Organization." At the beginning of his talk he touched upon a subject which has disturbed him considerably, that is, the American penchant for organization. Here is an extract of his remarks.

> I hope you will not consider me irreverent when I tell you that I have often wondered what Americans will do when and if they enter the Pearly Gates and find that there are no organizations to belong to, no more meetings to attend, and no more cocktail parties and dinners to bring the day to a relaxing close. Imagine their disappointment and how restless and difficult they will become, for no people on earth are more gregarious than Americans.
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> I am sure you will agree that the classified telephone directory would not ordinarily be considered a source book for a talk of this kind, but I found it very helpful. For example, when I turned to the heading "Associations" in the Washington Classified Telephone Directory, I found that there were 749 listings. If each of these represents an organization active in the District of Columbia, and if each of them meets once a month, approximately 9,000 meetings were held here in the past year. If the attendance averaged 110, at least 100,000 persons participated.
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> These estimates do not include a good many organizations which have no telephone listings. If this is taken into account, one wonders when our citizens find time for anything but meetings. In the medical field alone, there are 30 or more organizations. If a physician belongs to even one third of them, he will spend few nights at home, because, in addition, he is required to attend hospital staff meetings and informal conferences of various sorts. One physician told me the other evening, when I asked him why he had not been present at a recent medical meeting, that he had not been home any evening for a month.
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> Perhaps one reason most physicians get by with such a schedule is explained by a cartoon of a middle-aged doctor with bags under his eyes saying to a brother physician, "At the rate I am working these days, if we didn't have medical meetings I'd never get any sleep."
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> Now, I need not tell you that I would be the last person to advocate the elimination of all organizations or even a majority of them, if for no other reason than that I have to eat. But I must confess some amazement at the vast number of organizations in our own city. Some of them have strange names. There are Defenders of the Furbearers, The Telephone Pioneers of America (this must be a women's group), the American Federation of Astrologers, the Volunteers, Inc., the Repeal Associates, the Silver Users Corporation, and the National Wooden Box Association. I do not mean to suggest that even these organizations do not fill a need; however, I do not hesitate to say that none of them render a more important service, not only to their members but to the community, than do professional organizations if they are well organized and efficiently conducted.

Upon rereading these comments several months after they were written, your Observer finds them remarkably restrained. The blunt truth is that we Americans are possessed by organization madness. We organize for some purpose, worthy or decidedly less so, on the slightest pretext. The question naturally arises: What can be done about it?

Your Observer can only venture the opinion that people are becoming weary of the multiplicity of demands being made upon them by the many organizations to which they belong. There are indications that some organizations are having hard going due largely to the apathy of their members. Symptomatic are the lack of interest in the organization's affairs and indifferent financial support.

Perhaps these deductions are merely wishful thinking. If, however, they prove to be correct, basic organizations such as our Medical Society should not only survive but should gain greatly thereby in strength and spirit.

The Democratic Process A few of our members have expressed a longing for the "good old days" when controversy was the order of the day. Meetings were long drawn out, often vituperative affairs, no holds being barred. There was little trouble filling the Society's auditorium, your Observer has been told, because no one wanted to miss the "show."

From reports these controversies were often entertaining—sometimes hilarious! Just as often they were boresome, especially to thoughtful members, who were deeply disturbed by the adverse effect they might have on the Society.

There is little point in dwelling on the bitter experiences of the past unless they hold lessons for the future. The fact is that the controversy which raged within the District Medical Society in the latter 1930's was nearly catastrophic.

In an effort to bring about comparative calm, officers decided upon a course far off the Society's long-trodden path. Detailed reports were chosen as the weapon to bring desultory and often heated discussion on the floor to an end. These were received with good nature but some skepticism. Fortunately, they had the desired effect of keeping discussion on an even keel. No longer could a speaker rise to a point of order and make a statement about another physician's statement only to have him deny it. A mimeographed copy of the report under consideration was not only in the hands of the officer presenting it but in the hands of each member present.

In 1939 monthly business meetings were held by the Society. These made heavy demands not only on the members but on the office staff which had to prepare the reports. It soon became apparent that attendance, which had dwindled perceptibly as controversy waned, did not warrant holding monthly business meetings. They were soon reduced to four yearly and, finally, to one, the Annual Business Meeting.

The lesson learned from this experience was that a medical society as large as ours could obviously not be conducted in a "town hall" fashion. That had been made clear by disheartening events immediately preceding the reduction in meetings. It was also clear that, except for the promulgation of policies, management of the Society's affairs had to be vested in the Executive Board.

Lest your Observer be misunderstood, these observations are not presented for the purpose of promoting the thought that democratic processes in our organization are unworkable. Quite the contrary. Failure in this respect would seriously weaken the Society which, if it is to be effective, must be responsive to the will of the majority of its membership. Neither does he feel that differences of opinion are to be deplored. In fact, he believes they are essential to the Society's well being and an indication of its vitality.

But honest differences and useless controversy are two entirely different things. The first leads to sound decisions; the latter to strife and, not infrequently, disaster.

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Two Hundred Million If one were speaking of current Government expenditures, 200 million would be quite a trivial figure. But these comments are not concerned with dollars but with human beings and, in such terms, it staggers the imagination. Yet the *Statistical Bulletin of the Metropolitan Life Insurance Company* for May, 1952 prognosticates that the present population in the United States of 156,500,000 will increase by nearly 50,000,000 at the end of this century.

Those of us who have reached more mature years will not be around when the century ends. Your Observer has no regrets on this score. Like most of his contemporaries, he doesn't contemplate the prospect of more people, more automobiles, more homes and, in general, more congestion, with any enthusiasm. On the contrary, he views it as something he can get along very well without.

Among other facts about our increasing population presented by the *Bulletin* were the following:

The census of 1950 showed a decennial increase of about 19,000,000, the rate of growth being 14.5 per cent or fully twice the rate between 1930 and 1940.

In 1946, the marriage rate in the United States was at an all-time high of 16.4 per 1,000—more than twice the rate in 1932. The birth rate reached a level of 26.6 per 1,000 in 1947, the highest in a quarter of a century. In the past 5 years more than 18,500,000 babies were born in our country; in 1951 alone the number reached a high mark of 3,833,000.

Families have increased by about 25 per cent in the past decade, from approximately 32,000,000 to 40,000,000.

There are 86,000,000 who have accumulated over $250,000,000,000 of protection through private life insurance companies. Although the United States has only about 7 per cent of the world's population, its people have about three quarters of the world's life insurance.

There are now about 62,000,000 workers in the civilian labor force. Their average annual income is $3,300 per family. "Never before," the *Bulletin* states, "have earnings been so large even when adjusted in terms of 1939 dollars."

Women make up a large segment of the labor force, now totalling 19,000,000. Married women have swelled the ranks of the working population, a large number being employed after their children have grown up.

Mortality conditions have improved to the point where the number of families broken up in the course of a year by the death of husband or wife is actually one third less than would have been the case 50 years ago. One by-product of this is the reduced incidence of orphanhood.

One half of all the deaths among men are at ages under 65 years; one death out of every 5 occurs under the age of 45.

It is still true that the wife outlives the husband by a ratio of 5 to 3. If she is younger by 5 years, it is 10 to 7. That accounts for the large number of widows; the proportion of widows to widowers is about 3 to 1.

Due to the rise in the birth rate, the proportion of children under 5 years of age has increased from 8.0 to 10.8 per cent of the total population between 1940 and 1950, thereby reversing the trend in evidence since 1860.

Finally, the percentage of older people has increased twofold since the turn of the century. In 1950 the proportion of the population who were 65 and older was 8.2 per cent.

While maturer individuals may take a dim view of some of these developments and the problems inherent in them, the younger generation, whatever their misgivings, will have none of the pessimism of their elders. Like youth in all times and all places they will go forward enthusiastically, confident that they can meet the challenges of their day.

T. W.

WOMAN'S AUXILIARY NOTES

As the MEDICAL ANNALS goes to press final arrangements are being made for a luncheon for wives of visiting physicians, which is to be held on September 30 at the Hotel Statler in conjunction with the 23rd ANNUAL SCIENTIFIC ASSEMBLY of the District of Columbia Medical Society. The wives of all doctors attending the SCIENTIFIC ASSEMBLY have been invited to attend and a large group is expected. The guest speaker will be Dr. Winfred Overholser, renowned psychiatrist and Superintendent of St. Elizabeths Hospital, this city. The President of the Woman's Auxiliary to the D. C. Medical Society, Mrs. Ernest E. Hadley, and the Chairman of the Social Committee, Mrs. Lawrence A. Rapee, with the assistance of her committee, are completing final arrangements.

Wives of members of the District Medical Society are eligible for membership in the Woman's Auxiliary and are invited to join and attend the meetings. Interesting programs are arranged and refreshments are served after the meeting. Through regular attendance at these meetings and participation in the various activities, friendly, cordial relations are established among the doctors' wives.

A variety of activities are offered to the members of the Woman's Auxiliary this year, some of which are bowling, swimming, dancing, bridge, millinery, flower arrangements, etc.

The Southern Medical Association meets in Miami, Florida, November 10-13, 1952 and the Woman's Auxiliary to the Southern Medical Association has extended a cordial invitation to wives of doctors attending the meeting to attend all of its activities. The hospitable Miamians say they have planned a delightful program for the ladies.

MRS. LEO C. VARDEN
Publicity Chairman

SPECIAL REPORT OF THE EXECUTIVE BOARD*

This special business meeting of the Medical Society has been called for the sole purpose of discussing the recommendations of the Committee on Group Insurance with respect to group health and accident insurance for members.

It had been hoped that it would not be necessary to hold this meeting because of the action taken by the Society on May 7 when it adopted the recommendations contained in the Board's Supplementary Report. The report read in part as follows:

> "The [Special] Committee [on Health and Accident Insurance] has submitted to your Board the result of several months' labor, a description of a group health and accident policy written jointly by the Continental Casualty Company of Chicago and the American Casualty Company of Reading, Pennsylvania. Your Board is favorably impressed and will give its final approval when it has had an opportunity to read the policy to be issued. The Society's legal counsel will also review the policy.
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> "What your Board seeks now is authorization for the insurance companies to canvass the membership in an effort to obtain the required number of subscribers to form a group in accordance with an agreement with the insurance companies. If you approve this recommendation the policy will not become effective until approved by the Board. Your Board also asks authorization to sign an agreement with the insurance companies that when 50 per cent of the insurable members have subscribed that the benefits and premium rates agreed upon become effective."

At the close of the Board's report was this recommendation: "that the Special Committee on Health and Accident Insurance be authorized to proceed in the manner recommended and that the Executive Board be authorized to enter into an agreement with the insurance companies as stated in this report."

This recommendation was unanimously adopted by the Society.

It will be noted that the Special Committee's recommendations related to a policy written jointly by the Continental Casualty Company of Chicago and the American Casualty Company of Reading, Pennsylvania. Because of unforeseen circumstances the Committee was forced to reconsider its recommendation with respect to the choice of companies and policy.

The Executive Board, at its meeting on June 30, 1952, received a communication from Dr. Richard H. Todd, Chairman of the Committee, in which he stated that his Committee had voted to recommend to the Executive Board that in place of the policy originally recommended, a group health and accident policy written to the Committee's specifications by the Mutual Benefit Health and Accident Association of Omaha be approved. The Board voted not to accept the Committee's recommendation and requested that it give the matter further study.

It should be mentioned in passing that the Executive Board voted at its June 30 meeting that the Special Committee on Health and Accident Insurance be made a permanent committee of the Society, to be known as the Committee on Group Insurance.

At its meeting on July 28, 1952 the Board again gave consideration to the Committee's proposal and, after hearing Dr. Todd personally, voted to approve the policy of the Mutual Benefit Health and Accident Association of Omaha. This recommendation is being submitted to you tonight for a vote.

Before voting on this matter your Board felt that Dr. Todd be given an opportunity to report on the activities of his Committee and how it arrived at its conclusion to recommend the endorsement of the Mutual policy.

Respectfully submitted,
JOHN MINOR, M.D., *Chairman*
WILLIAM M. BALLINGER, M.D.
WALTER FREEMAN, M.D.
HUGH H. HUSSEY, M.D.
WILLIAM ROSS MORRIS, M.D.
HERBERT P. RAMSEY, M.D.
WALLACE M. YATER, M.D.
THEODORE WIPRUD, *Secretary*

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* Adopted at a special business meeting of the Medical Society of the District of Columbia, August 20, 1952.

SAINT ELIZABETHS HOSPITAL—A CENTURY OF TRADITION*

WINFRED OVERHOLSER, M.D., Sc.D.

Superintendent, Saint Elizabeths Hospital, Washington

"The title of the institution shall be The Government Hospital for the Insane, and its object shall be the most humane care and enlightened curative treatment of the insane of the Army and Navy of the United States and of the District of Columbia." Thus began the act creating Saint Elizabeths Hospital, approved by the President on March 3, 1855. The words, penned by Dorothea Lynde Dix, strike the keynote which has characterized the Hospital during its nearly 100 years of existence. It is particularly appropriate that today we should consider briefly some of the traditions which have developed over the last century, for it was exactly 100 years ago, in 1852, that the Congress appropriated the sum of $100,000 for the purchase of a site, for the erection of a building, and for its equipment. Since that time many changes have taken place in the world as well as at Saint Elizabeths Hospital, but the spirit which animated Dorothea Dix has remained unchanged. It is not my purpose to give a detailed history of the evolution of the Hospital during those 100 years, but rather to show the continuity of the purpose and to illustrate by a few references to past annual reports and other writings the truth of the French saying, "plus ça change, plus c'est la même chose" (the more a thing changes, the more it remains the same).

There seems little doubt that Dorothea Dix visualized the institution as largely military. Provisions of a sort were already made for residents of the District of Columbia, but in 1852 there was no facility for the military personnel who developed mental disorder. During the Civil War, indeed, four fifths of the patients were military. It is clear, however, that the intention was that it should not be under military discipline or control, but that its atmosphere should be essentially civilian. Indeed, to my mind, this was one of the strong features of the therapeutic atmosphere of the Hospital during each of the four wars during which it has served the armed forces. Representative Davis of Indiana, in introducing the bill, stated that there were at that time 33 public institutions of the sort and 5 private hospitals in 23 states, that 3 others were under construction, and that within the past 15 years, that is, since Dorothea Dix had started her campaign, 16 had been opened. The Secretary of the Interior in forwarding the bill to Congress stated that he had studied the so-called "propositions" passed by the Association of Medical Superintendents of American Institutions for the Insane (the organization which has since become The American Psychiatric Association) in 1851, and that he was in entire agreement with them. The official view was that not more than 250 beds should be the capacity of any mental hospital; indeed, the original plans for Saint Elizabeths called for approximately 90!

In those days the régime of the Hospital was carefully spelled out in the by-laws, although those writings do not approximate mid-20th century "standard procedures" and other red tape. No employee, for example, was to be outside the hospital grounds after 9:30 p.m. without the "express permission of the Superintendent." Then, too, a bell was provided for—every well-run mental hospital must have a bell, which rings for some reason or other, perhaps even though the reason be long forgotten! In 1855 the morning bell rang at 5 o'clock in summer; at least we have now substituted a less barbarous hour!

Provision was made for a resident superintendent, who should be a physician experienced in the care of the mentally ill, and as well for a board of visitors, that is, an unpaid group who were directed by the law to "exercise so careful a supervision over its expenditures and general operations that the Government and community may have confidence in the correctness of its management." This was the usual procedure, and in my opinion a very wise one. I am thoroughly convinced of the value of a lay unpaid board of visitors for institutions of this sort, a board made up of outstanding citizens who have no financial interest in the operation of the hospital.

The site selected by Miss Dix was a commanding one, and much is made in earlier reports of its healthful nature. The plan for the Hospital (now called

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* Part I of a paper presented at the 15th Annual Meeting of the Medical Society of Saint Elizabeths Hospital, April 19, 1952. Part II will appear in a subsequent issue of the Medical Annals.

Center Building) was improved by Dr. Charles H. Nichols, the first superintendent, over the original Kirkbride plan by being built in echelon rather than on a straight front.

From the very beginning it was hoped that the institution would be a leader in its field. The Secretary of the Interior, for example, in 1859 reported to Congress, "When all the buildings shall have been erected, the grounds enclosed, and the appointments completed the institution will be a model of its kind, and with the continuance of the successful management it has heretofore received it will be an honor to the Government and an inestimable blessing to that unfortunate class for whose benefit it was designed." Dr. Nichols, in 1860, commenting upon the fact that a Government establishment situated at the Capitol of the Republic is in every respect a representative institution, spoke of that "pursuit of perfection which we have sought to make the cardinal animating principle of the management of the Hospital."

We should remember that when the institution was opened very little was understood of psychodynamics or psychotherapy, and the great emphasis was laid on what Pinel and his successors had referred to as "moral treatment." Every effort was made to have home-like and tasteful surroundings, and throughout the reports we find references to flowers and pictures, "making it home," "finding healing in the touch of the grounds," to the sun baths and the walks under shady trees. An interesting touch was the finishing of several of the wards in what is now the Center Building in the woods after which they are named, such as Cedar, Chestnut, Locust and Walnut. In the very first annual report comment was made on the need of a circulating library for the members of "our secluded household." In the report for 1888, besides the comment that the grounds are among the most beautiful in Washington, is found an extended commentary on the necessary qualities of the physician and the attendant. Education, patience, kindness and tact were mentioned, and it was pointed out even then that the attendant is the person most constantly in touch with the patient. Another modern note is the comment that higher wages are needed in order to hold suitable persons, while individual attention to the patient is spoken of as being more important than anything else which can be done for him. Emphasis from the start was laid upon the necessity and desirability of occupation for the patients.

Much was done in the line of entertainment and amusement. Pliny Earle, for example, one of the original 13 founders of the American Psychiatric Association, who spent some time at Saint Elizabeths during the Civil War, gave lectures to the patients on general topics of interest. In 1866 it is reported that every other evening one of the physicians conducted a general entertainment, usually a popular treatment of some scientific subject. By 1862 the Hospital was reported to be the largest institution of its kind in the United States. There had, of course, been a very marked influx of military patients, and in addition several of the wards in the Center Building were set apart for the care of surgical patients from the Union Army under the title of Saint Elizabeths Hospital, after the name given to the tract by the early Maryland settlers. Although it was thought in 1861 that the political disturbances of the country would increase the number of the "indigent insane" of the District of Columbia, it was soon found that such was not the case. Civil cases, indeed, were fewer than before, in spite of the upheaval. "We find," said Dr. Nichols in his annual report for 1863, "the loyal mind deriving an incalculable moral support from a universal sense of the entire justness of the National Cause and an equally prevalent faith in its ultimate and complete triumph." A similar state of affairs was noted in England during World War II, where civilian admissions to mental hospitals showed a decrease.

Somewhat more startling than this comment on the mental health of the civil community during war is the discussion by Dr. Nichols of the importance of the psychiatric selection of recruits. "The duty of the examining surgeons," he says, "to give more critical attention to the mental character of the candidate for service whether volunteer or conscript is the practical lesson to be derived from the facts just submitted. . . . The acceptance of an incapable candidate for service and the exemption of a capable one are equally culpable frauds upon the country. The first is a gross cruelty to the individual and the latter an equally gross partiality." This lesson, learned in World War I but only tardily recognized in World War II, seems now to have been entirely forgotten or deliberately disregarded by the Selective Service! As for the nature of the mental disorders occurring among the military it was stated that not more than 2 per cent of the cases received from the Army and the Navy were directly due to personal participation in active hostilities. The other 98 per cent were attributed largely to homesickness and a change of climate, with not too hopeful a prognosis. The situation in subsequent wars was somewhat different. In the Spanish War the cases were referred to as being in large measure curable; at least a rate of 62 per cent was reported, and those of us who remember World Wars I and II will bear in mind the rapidity of improvement in the majority of the cases of mental disorder occurring in the military forces.

The name of Saint Elizabeths Hospital, which had been originally applied to the section set apart for surgical patients, seems to have remained in vogue after the closing out of that particular activity. In 1868, for example, Dr. Nichols reports that "It is thought to have been a happy circumstance that gave this establishment a designation of so much beauty and of such sacred association and that is entirely agreeable to the parties most interested." It was not until 1916 that the Congress finally confirmed the usage, officially changing the name of the Hospital.

Dr. W. W. Godding, who succeeded Dr. Nichols on the latter's resignation in 1877, was, like his predecessor, humanitarian and progressive. He emphasized the importance of comfort and home-like surroundings, and in his Presidential Address before the American Psychiatric Association he referred to these "vast hall spaces lined with settees in stately Gothic, medieval in their discomfort, of which good old Doctor Ray once said to me inquiringly, 'Nobody ever sits down on these things?' " He urged special wards for the treatment of mental disease in general hospitals as well as hospitals for acute cases, and stressed the need of individualized treatment. He considered brain surgery "but in its infancy." He thought it possible that hypnotism would help in treatment and suggested trying the effect of electricity. He stated the policy of the Hospital as being to omit nothing essential to the proper care and to avoid unnecessary expenditure. Treatment, he said, should not be stereotyped. "We undertake," he added, "to be old fashioned or any fashioned if by any means we may save some. We are not wedded to any system nor do we claim to have any new light, are not especially gifted, only thankful for common sense. It is a practical working hospital, not an ideal one."

One point which illustrates how far we have progressed in matters of public health refers to malaria. The first mention of "fever and ague" is found in the report for 1872, but from that time on it was apparently a serious problem. Especially in 1893, when the Government started to fill in the Anacostia flats, there was a marked increase. Characteristically the work lagged, and in 1897 Dr. Godding referred to the "masterly inactivity" which had apparently settled over the Government with relation to the flats. What had happened was that just enough filling had been done to obstruct the free flow, so that the amount of stagnant water was greatly increased. By 1898, for example, 85 per cent of the patients suffered from malaria, and interestingly enough 2 cases of general paresis were reported to have been greatly aggravated by this infection!

Mention of malaria, of course, brings up the role which Saint Elizabeths Hospital played in the development of the Wagner-Jauregg method of treatment of general paresis. In 1892 general paresis exceeded tuberculosis as a cause of death in this Hospital. Various treatments were tried and a great deal of store was laid by the cold wet pack with opium to tolerance, but in 1896 we find a comment to the effect that the disease is "entirely incurable." Many of us remember the attitude toward general paresis and its incurability up until 1922 when for the first time in the Western Hemisphere malaria was given therapeutically to a case of general paresis of this Hospital under the direction of Dr. Watson W. Eldridge, still a member of the staff. The revolutionary effect of this treatment of general paresis is a matter of history, regardless of what the eventual role of penicillin in the permanent cure of general paresis may turn out to be.

In 1884 Dr. I. W. Blackburn was appointed pathologist. This appointment was hailed as a new departure "which can hardly fail," said Dr. Godding, "to result in the enlargement of the bounds of our present too shadowy knowledge on this most important subject." Dr. Blackburn continued a very fruitful activity until his death in 1911, publishing regularly for many years a pathologic supplement to the annual report. He was one of the pioneers in neuropathology in this country and his name is inseparably

Calendar of Meetings, July 16–September 15

July	21	Obstetrical Board
July	22	Subcommittee on Chronic Alcoholism
July	28	Executive Board Board of Censors Instructive Visiting Nurse Society
July	29	Medical Service of D. C. Traffic Committee
August	8	Press Conference
August	12	Medical Officers' Reserve Units
August	20	Special Business Meeting of Society
August	22	Committee on Public Health
August	29	Committee on Group Insurance
September	2	Committee on Attendance, Annual Scientific Assembly
September	8	Committee on Arrangements, A. S. A. Instructive Visiting Nurse Society
September	9	Medical Officers' Reserve Units Grievance Committee
September	12	Subcommittee on Diabetes Section on Radiology

linked with Saint Elizabeths Hospital.

Lest it be thought that all of the therapy at the Hospital was of the so-called "moral" variety, it should be mentioned that hyoscin, quinine, iron, strychnine, cod liver oil, bromides, with or without chloral or opium, and urethane as a hypnotic, were a main reliance in the 80's. Alcohol was used in the feeble and infirm cases and, says Dr. Godding, "It has been thought by the old soldier to be an aid to his digestion." He reports also that tobacco is given to those who have been its "victims since the war." There was, then, such a thing as drug therapy, but entirely of a palliative variety.

Another innovation at Saint Elizabeths Hospital was hydrotherapy. An equipment was set up in the Oaks Building in 1897 and Dr. G. W. Foster, who was in charge of it, was Dr. Simon Baruch's first pupil from a mental hospital. Hydrotherapy had a marked rise following this period, although it seems at the moment to be in eclipse in certain circles. I am convinced that ultimately it will survive, despite its being overshadowed in certain quarters by electroshock. It has been consistently used to a very large extent in Saint Elizabeths Hospital ever since it was first introduced. One of the very early schools of nursing, too, was begun at Saint Elizabeths Hospital in 1894, developing into the three-year course which was commenced in 1923 and which is being discontinued for various reasons as of this year. It appears to some observers that the graduate nurse has priced and educated herself out of the day-to-day care of the mentally ill and that her place is coming to be taken by the so-called psychiatric aide. This Hospital will, of course, continue to train attendants and psychiatric aides.

Dr. Godding died in 1899 and was succeeded by Dr. A. B. Richardson, who died prematurely in 1903. His régime is best remembered by the fact that during it construction of a large number of the buildings of the Hospital was commenced. He also began the practice of giving lectures to medical students and established one of the very early photographic departments and pathologic museums.

(To be continued)

DR. HOLDEN HEADS RED FEATHER CAMPAIGN FOR DOCTORS

Dr. Raymond T. Holden, Past President of the Medical Society of the District of Columbia, and retiring Chairman of its Executive Board, has been selected to head the Physicians Group for soliciting funds in the 1953 Community Chest-USO Campaign. With the slogan, United Giving for United Living, the Campaign got under way on October 6, under the chairmanship of Herbert C. Blunck, General Manager of the Hotel Statler.

Again, the three major professions, doctors, lawyers, and dentists, are organizing their own solicitation, this year under the chairmanship of David P. Linowes, of Leopold & Linowes, certified public accountants. Mr. Linowes will be assisted by two vice chairmen, John J. Corson III, Manager of the Washington offices of McKinsey & Company, and Charles Bogan, Sales Manager for the Manger Hotels in Washington. The Professional Group totals almost 5,000 persons—2,300 lawyers, 1,700 physicians and 700 dentists. All three professions exceeded their goal in the campaign last year.

Co-chairman with Dr. Holden for the Physicians Group is Dr. William F. Nelson, Past President of the Medico-Chirurgical Society of the District of Columbia. Drs. L. M. Lucas and C. N. McMillan are Co-chairmen for the Dentists, and John A. Kendrick and Barrington D. Parker, Co-chairmen for the Attorneys.

Dr. Edward C. Wilson and Dr. Robert R. Montgomery are assisting Dr. Holden in organizing the campaign among the doctors. They have divided the city for their purposes into nine areas and have appointed the following area chairmen:

Area I: Drs. William L. Howell and Clyde P. Reeves
Area III: Drs. Richard B. Castell and Henry A. Monat
Area III-A: Drs. Raymond A. Osbourn, Samuel M. Dodek and Robert J. Coffey
Area IV: Drs. Charles W. Jones, Ashby W. Smith and Charles S. Coakley
Area V: Drs. George W. Reeves and Elizabeth E. Chickering
Area VI: Dr. Wm. Robert Perkins, Jr.
Area VII: Drs. Blanche W. Nimetz and H. Franklin Kreuzburg
Area VIII: Dr. Robert B. Irey
Area IX: Drs. Robert C. Hecker and Eugene J. Yorkoff

RAYMOND T. HOLDEN, M.D.

The goal for this year's Campaign is $4,150,000 for 102 agencies that service approximately 250,000 people throughout the entire National Capital area. This represents an increase of $100,000 over last year's goal and $315,000 more than was raised last fall. Included in the total sum is Washington's share in the United Defense Fund-USO for services to members of the armed forces and their families. The Professional Group has been asked to assume 3.9 per cent of the goal, or approximately $158,433. Of this amount the physicians are asked to contribute $37,850, which is $1,950 over last year's quota.

BOOK REVIEWS

The Unipolar Electrocardiogram; A Clinical Interpretation. Joseph M. Barker, M.D., F.A.C.P., Cardiologist, Yater Clinic; Associate Professor of Clinical Medicine and Special Lecturer in Physiology, Georgetown University School of Medicine; Director of the Heart Station and Visiting Physician, Georgetown University Hospital; Chief of Cardiology, Providence Hospital; Visiting Physician, Gallinger Municipal Hospital; Consulting Cardiologist, Arlington Hospital, Arlington, Va. Assisted by Joseph J. Wallace, M.D., F.A.C.P. Advised by Wallace M. Yater, M.D., F.A.C.P. Foreword by Frank N. Wilson, M.D., F.A.C.P. Price, $12.50. Pp. 655, with 458 illustrations. New York: Appleton, 1952.

This book on modern electrocardiography, based on the Frank Wilson School of interpretation, is excellent. The author, one of Dr. Wilson's pupils, has presented a difficult subject in a very clear, logical and scientific manner. Fundamentals of basic electric phenomena and the theory of electrocardiography are explained in necessary detail. An outstanding feature of the book is the large number of diagrams illustrating and clarifying the text material in a fashion which the reviewer feels is not equaled by other books on this subject. In addition to the basic discussion on theory, the chapters dealing with Bundle Branch Block, Myocardial Infarction, Transient Myocardial Ischemia and Injury, and Ventricular Hypertrophy are especially good. Electrocardiograms illustrating the various points are ample with clear reproduction.

Dr. Barker repeatedly emphasizes the importance of a complete clinical evaluation of the cardiac patient as a whole, and not solely from his electrocardiogram.

This book will help any physician dealing with patients who have heart disease. The medical student will likewise welcome it "with open arms." It will be read and re-read before extracting all of the "meat" packed between its covers.

W. PROCTOR HARVEY, M.D.

Pharmacology in Clinical Practice. HARRY BECKMAN, M.D., Director, Departments of Pharmacology, Marquette University Schools of Medicine and Dentistry; and Consulting Physician, Milwaukee County General Hospital and Columbia Hospital, Milwaukee, Wisconsin. Price, $12.50. Pp. 839, with 152 figures. Philadelphia: Saunders, 1952.

This textbook of Pharmacology reflects the philosophy of preclinical teaching held by the author. Descriptive pharmacologic data per se have been subordinated throughout the book. The material of Section I, comprising 714 pages, is oriented in terms of symptoms and specific diseases rather than the chemical groupings of drugs. The full range of clinical medicine is viewed in the light of therapeutic opportunities presented to pharmacology. The smaller Section II, 54 pages designed for reference, supplies in its compendium of drugs the important chemical and physical facts about the drugs discussed in Section I. These are listed according to chemical title, cross indexed with proprietary names, and include descriptions of representative commercially available preparations of each.

The style of writing is attractively informal with no reluctance to express personal opinion and prejudice. Each main topic is followed by a well chosen, up-to-date list of "Suggested Excursions into the Literature."

A section on the common poisonings seen in clinical practice would make a valuable addition.

An excellent index of 68 pages does much to overcome the difficulty of gathering the full picture of those drugs with broad therapeutic range. The publishing is excellent. The whole is an interesting and useful book for the student of Pharmacology.

JOHN T. ALEXANDER, M.D.

The Battle for Mental Health. JAMES CLARK MOLONEY, M.D. Price, $3.50. Pp. 105. New York: Philosophical Library, 1952.

In this small volume, Dr. Moloney focuses attention on the growing problem of mental illness. As evidence of the "disorganization" of our culture, statistics are cited which emphasize the increasing numbers of the insane and the high incidence of crime, delinquency, alcoholism, divorce, and suicide.

Dr. Moloney asserts that mental health is the natural birthright of every individual, but that emotional maturity in the adult can be achieved only if the innate tendencies toward health are properly nurtured and encouraged. This in turn requires a relaxed, permissive, spontaneous relationship between mother and infant during the earliest months of life. The younger the child, the greater his plasticity and vulnerability, hence, the supreme importance of emotionally healthy contact between the mother and her new baby. Anxieties and tensions in the mother are readily communicated to the infant, and, according to the author, may lead to disturbances of behavior which continue throughout life.

Among factors interfering with a healthy, relaxed relationship between mother and infant are tensions and uncertainties of external origin relating to economic stresses and general world unrest; the emphasis in our culture on perfectionism and competitiveness; and the fetish of the "scientific," the "mechanical," and the "intellectual," which has led to bottle nursing, regimentation of feeding schedules for infants, rigid patterns of toilet training, and a general pattern of life which stifles spontaneity and leads to increasingly conformist behavior.

Much of the responsibility for conditions presently unfavorable for a relaxed, close relation between the mother and her new child must be borne by physicians and hospital personnel whose attitudes and practices encourage the immediate separation of mother and child, either physically or emotionally. Dr. Moloney favors the "rooming in" system recently established in many maternity wards and urges its wide adoption, believing that its advantages in terms of mental health far outweigh any practical difficulties in its institution.

In order that mothers may be more relaxed and spontaneous in relation to their new infants, the author recommends that we cease blaming them for the emotional ills of their children; that we accord women a more realistic understanding of their role in our culture, one less encumbered with the notion of masculine superiority; and that greater emphasis be placed on the role of the father in decreasing external tensions in the home, and in providing opportunities for the mother to share her attentions when there are several children in the family. Finally, Dr. Moloney points out that, although our culture is advanced in many respects, we still can benefit from an understanding of the permissive attitudes of some "primitive" peoples with regard to child rearing.

(*Continued on page 576*)

Concerning Those Who Work with Us

MEDICAL TECHNOLOGY

EDUCATION OF A MEDICAL TECHNOLOGIST

Mary Ann Fallers, M.T. (A.S.C.P.)

President, District of Columbia Society of Medical Technologists

Prior to the development of Medical Technology as a recognized and generally accepted branch of medicine, the physician's time was in part consumed in examining laboratory specimens. Within the last 25 years the medical technologist has been given the responsibility of performing the many and varied laboratory examinations required by the physician in his practice of modern medicine.

As the importance of this role has become recognized, the profession of Medical Technology has come into reality and is today flourishing at a rate comparable to the discoveries of newer and better methods of treatment. Corresponding with this rapid increase of demand for medical technologists came the surge in training programs. Currently, there are 501 schools approved by the Council on Medical Education and Hospitals of the American Medical Association. This figure represents twice the number of schools in existence 5 years ago, and more than 10 times as many as existed 15 years ago. It now includes approved schools in the Canal Zone, Hawaii and Puerto Rico. In the past decade the District of Columbia has increased the number of schools from 2 to 6, with an increase in maximum enrollment from 4 to 45.

Before a prospective student is accepted at one of these approved schools for training the following minimum requirements of education must be met from a college or university recognized by the regional accrediting association: at least 60 semester hours, of which 12 semester hours are biology (general biology, bacteriology, parasitology, physiology, anatomy, histology, embryology or zoölogy); 6 semester hours of general inorganic chemistry (lecture and laboratory); 3 semester hours of quantitative analysis, organic chemistry or biochemistry (lecture and laboratory, plus electives). Suggested courses in electives include physics, mathematics and typing.

Over and above these minimum requirements many schools elect to screen their students by raising the minimum requirements to a college degree. Others go along with the minimum prerequisites but encourage the applicants to continue their education for a degree. Medical Technology is a science dealing with human lives, and a thorough education is most essential if the product of a medical technologist is to be reliable.

When the student has met these requirements he or she is now prepared to enter one of the approved schools for a concentrated course in laboratory technic. The course usually consists of lectures and practical experience in the laboratory itself under the direct supervision of a qualified medical technologist. Since the clinical laboratory has many departments the student is allotted a certain period of time in each department. These departments must include urinalysis, hematology, biochemistry, parasitology, bacteriology, histology, serology, and blood bank. Also, it is necessary to train the student to keep accurate records of the examinations. A knowledge of bookkeeping and typing is an important asset in this field.

Since many high school graduates can be trained to do the simple routine tasks adequately, it has become necessary to distinguish the qualified medical technologist from the laboratory aide. The difference in educational background should provide the technologist with a greater ability to perform the difficult and more complicated examinations and to assume responsibility for the tasks ordinarily assigned by the pathologist. The screening test is met through the semi-annual Board examinations of the Registry of Medical Technologists of the American Society of Clinical Pathologists. Those who pass this examination and are accepted by the Board may use the initials M.T.(A.S.C.P.) after their name.

A registered medical technologist is bound by a code of ethics which directs that (a) his conduct shall in no way be inconsistent with the ethical requirements of the American Society of Clinical

Pathologists and the American Medical Association; (b) the medical technologist (A.S.C.P.) shall work only under the direction and supervision of a pathologist or physician; (c) he shall make no diagnosis or interpretation beyond the requirements of the laboratory reports; (d) he shall not advise physicians on the treatment of disease; (e) he shall not accept technical work from any source other than from his employer's practice; (f) he shall not train students without the supervision of a clinical pathologist; (g) he shall not engage in laboratory work independent of qualified supervision, nor operate an independent laboratory; and (h) he may perform laboratory work on a commission basis under contract with a Public Health, research or clinical laboratory when such work is done as provided in "b" and when all contractural agreements are approved and signed by the director of the organization contracting for such service.

Results of an interesting survey on medical technologists were reported in 1950 by Miss Mollie Hill, M.T. (A.S.C.P.),[1] Chairman of the Standards and Studies Committee of the American Society of Medical Technologists. Of 17,080 questionnaires sent out, 16,672 were returned. Information derived from these replies was as follows:

	Number	*Per cent*
Hospitals that required technicians to be registered		7
Clinics and doctors' offices employing registered technicians		83
States that required state licensure	2	
Organized unions	2	
Hospitals which train technicians	67	
Students in training	1,234	
Full-time employed technicians	16,354	
Part-time technicians	571	
Jobs needing technicians	2,473	
Working hours:		
40 hours		65
44 hours		26
48 hours		0.09
Over 48 hours		0.001
Overtime:		
Night call		11
Split shift		5
Alternating		4
Not on call		80
Maintenance:		
Room		3
Medical care		78
Uniforms (laundry)		92
Pay for overtime		6.5
Salaries (average):		
Lowest	$219.00	
Medium	$294.00	
Highest	$356.00	
Reasons for leaving jobs:		
Better pay		52
Marriage		39
Attend school		2
Family ties		3
Illness		1
Discharged		2
Reasons not given		1
Members of C.I.O.	18	
Members of A.F.L.	35	
Technicians from approved schools not registered	667	

The recruiting program is of fundamental importance to any profession where the supply does not meet the demand. Each year the District of Columbia Society of Medical Technologists sends a representative to the local high schools on Career Day to interest the youth in continuing their education in a field such as this one, where they can be useful, will find the work interesting, and are badly needed. This same recruitment program is followed throughout the United States on Career Day in an attempt to fill new openings with qualified personnel.

Book Reviews

(*Continued from page 574*)

The author writes clearly and concisely, presenting his views forcefully. Many will object to the impression that he attributes all mental and many social ills exclusively to abnormalities arising in the early parent-child relationship. Certainly no one can yet point positively to any area of living as *the* source of the major functional mental disorders. Objection may also be raised that in statistics cited to show the increasing frequency of mental illness, figures are given without reference to the growing proportion of patients drawn from the older age groups who are suffering primarily from organic disorders.

This book may be recommended to physicians in general, to obstetricians, pediatricians, and psychiatrists in particular, and to all professional people concerned with the problems of child rearing and mental hygiene.

FRANCIS N. WALDROP, M.D.

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[1] Am. J. M. Technol., 1950, **16**, 214.

News and Personals

The 59th Annual Meeting of the Association of Military Surgeons will be held at the Hotel Statler in Washington, D. C., November 17–19. Major General Harry G. Armstrong, Surgeon General of the Air Force, and President of the Association, will open the meeting. Reserve officers will be afforded an excellent opportunity to be brought up to date on the latest developments of military medicine and may earn point credits on the basis of attendance.

The Southern Medical Association will hold its **46th Annual Meeting** in Miami, Florida, November 10–13, 1952. A cordial invitation is extended all members of the Medical Society and their wives to attend this meeting. Hotel reservations should be made through the Housing Bureau, Southern Medical Association, 320 N.E. Fifth Street, Miami 32, Florida. In the Advertising Section of this issue of the ANNALS is a special convention announcement.

Postgraduate courses arranged by the **American College of Physicians** have been scheduled for various cities throughout the country. Some have already been held. The following courses are scheduled in nearby cities during the late fall months:

November 10–15: Selected Topics in Hematology. New England Center Hospital, Boston, Mass. Dr. William Dameshek, Director.

December 1–6: Gastroenterology. University of Pennsylvania Graduate School of Medicine, Philadelphia, Pa. Dr. Henry L. Bockus, Director.

December 8–13: Recent Advances in Internal Medicine. Johns Hopkins University and University of Maryland Schools of Medicine, Baltimore, Md. Dr. Maurice C. Pincoffs and Dr. A. McGehee Harvey, Co-directors.

For each course the fee for members of the College is $30, and for nonmembers, $60. All registrations should be made through the Executive Secretary of the College, E. R. Loveland, 4200 Pine Street, Philadelphia 4, Pa.

The Fifth Annual Postgraduate Course on the Recent Advances in Diseases of the Chest, sponsored by the Council on Postgraduate Medical Education and the New York State Chapter of the American College of Chest Physicians, will be presented at the Hotel New Yorker, New York City, November 10–14, 1952.

The course is open to all physicians but registration will be limited. Tuition fee is $50. A copy of the prospectus together with an application form may be secured from the Executive Director of the College, 112 East Chestnut Street, Chicago 11, Illinois. The course has been approved for credits by the American Academy of General Practitioners.

The Veterans Administration is instituting a four-month **training course in psychiatry and neurology** to fit the needs of physicians without such previous training who are assigned to duty in 22 predominantly psychiatric hospitals. Physicians who have been engaged in general practice may request this training upon applying for a position at one of these hospitals.

The course will be held at the VA Hospitals in Coatesville, Penna.; Palo Alto, Calif.; and a joint Downey-Hines program near Chicago, Ill. Physicians will be employed at salaries commensurate with their training and experience (salary range: $5,500 to $11,800 per annum) and assigned to the course with travel and per diem for the four-month period.

Information and applications may be obtained from your nearest VA Hospital or Regional Office, or by writing to the Chief Medical Director, VA Central Office, Washington 25, D. C.

The American Urological Association offers an annual award of $1,000 (first prize $500, second prize $300, and third prize $200) for essays on the result of some clinical or laboratory research in urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to men in training to become urologists.

The first prize essay will appear on the program of the forthcoming meeting of the Association at the Hotel Jefferson, St. Louis, Mo., May 11–14, 1953.

Essays must be in the hands of the Executive Secretary, William P. Didusch, 1120 North Charles Street, Baltimore, Md., before January 15, 1953. Mr. Didusch will be glad to furnish full particulars upon request.

A new group, **the Commissioners' Advisory Council on Municipal Hospitals,** has been authorized by the District of Columbia Board of Commissioners to study the city's major health problems in order to give both the Commissioners and Congress a better understanding of the health needs of the city.

The committee is headed by Major Omer Clark, who retired in July as Deputy Administrator of the Veterans Administration. He had been associated with VA and its predecessor agencies since 1923.

The committee includes:

Dr. Wallace M. Yater, President of the District Medical Society; founder and Director of the Yater Clinic; and Editor of the MEDICAL ANNALS.

Dr. Norman Q. Brill, psychiatrist, Chairman of the Psychiatric Consultants Committee to the Surgeon General of the Army.

Dr. Arthur C. Christie, radiologist; Past President of the District Medical Society; and Chairman of the Medical-Technical Committee of the Tuberculosis Survey for the District of Columbia in 1948.

Dr. Worth B. Daniels, Clinical Professor of Medicine at Georgetown University School of Medicine and senior consultant in medicine at Mount Alto Hospital.

Dr. Clarence K. Fraser, Associate in Obstetrics and Gynecology, George Washington University School of Medicine, and on the staff of Emergency, Gallinger, Garfield, and George Washington Hospitals in obstetrics and gynecology.

Dr. John Hugh Lyons, Chief Surgeon of Emergency Hospital; attending surgeon at Children's Hospital; and Professor of Clinical Surgery at George Washington University School of Medicine.

Dr. Howard M. Payne, Professor of Medicine, Howard University; Vice President of the National Tuberculosis Association; and chief physician at the Tuberculosis Annex of Freedmen's Hospital.

Dr. John A. Washington, Assistant Clinical Professor of Pediatrics, George Washington University School of Medicine, and attending pediatrician at Children's Hospital.

Leo G. Schmelzer, Administrator of Garfield Memorial Hospital.

Mrs. Neville Miller, First Vice President of the Instructive Visiting Nurse Society.

Garfield I. Kass, President of Kass-Berger, Inc., builders; member of the board and chairman of the Finance Committee of the Hebrew Home for the Aged; and President of the Washington Hebrew Congregation.

Commissioner Renah F. Camalier, who supervises District health and welfare, said he expected the group to "complete its examination and submit its report not later than the end of this year, thus enabling the Board of Commissioners to have before it facts and data sufficient to enable definite recommendations to Congress, based on the best advice obtainable."

The Committee held its first meeting, September 9, in the District Building. First consideration was given to the District's tuberculosis program.

Currently, the **Committee on Pesticides of the AMA** is undertaking a country-wide toxicological study of cases of posioning resulting from the use of insecticides, rodenticides, fungicides, weed killers, fumigants, repellants and related types of chemicals used in agriculture and the home. This information will be used to expand its permanent file of such cases for the use of physicians and allied medical personnel.

The Committee appeals to physicians to submit records on cases of non-fatal and fatal poisonings from pesticides. Summary data on the pertinent facts of the poisonings and the circumstances of their occurrence would be sufficient in most instances.

The Student American Medical Association is encouraging physicians to join its organization as honorary members. This type of membership, with yearly dues of $5, entitles the physician to a subscription to the monthly 72-page *Journal of the SAMA* as well as participation in the annual convention and other activities of the Association. Physicians and friends of the medical student interested in becoming honorary members should write to Mr. David Buchanan, Student AMA, 535 North Dearborn Street, Chicago 10, Illinois.

Following the announcement that **Garfield Hospital School of Nursing** would not reopen this fall, a drive was undertaken to raise $30,000 from the public to continue the School for another year. The request for public funds proved successful. Among the large contributors were the Eugene and Agnes E. Meyer Foundation, and the medical staff and Women's Board of Emergency Hospital, which closed its School of Nursing a year ago. Generous contributions came in from doctors, student nurses, former patients, graduates and private citizens. In addition to the funds necessary to keep the School open for the coming year, a moderate amount was subscribed for its maintenance until the new Hospital Center, composed of Emergency, Garfield and Episcopal, can be built.

David B. Karrick, Vice President of the Hospital's Board of Directors, made this announcement after the funds had been received:

"The success of the drive, which was made without professional aid and with no overhead to the Hospital, was the result of a magnificent response of all sections of the city and all walks of life toward the preservation of a real community need."

When the decision to close the School was announced last July, a five-member committee headed by Dr. E. Clarence Rice was formed to meet with a subcommittee of the Board of Directors to take steps to avert the closing of the School. By reducing expenses, it was decided that the School could be kept open another year if $30,000 could be raised from private, outside sources by August 15.

A recent acquisition of the **Armed Forces Institute of Pathology** is a collection of 24 original anatomical drawings by Professor Tom Jones, consultant in medical illustration to the Armed Forces Institute of Pathology and Head of the Department of Medical Dental Illustration of the University of Illinois, Colleges of Medicine, Dentistry and Pharmacy, Chicago. These medical drawings may be seen at the Medical Museum of the Institute, 9th and Independence Avenue, S.W., from 9 a.m. to 5 p.m. daily.

In an announcement of the new exhibit, Professor Jones was described as "one of the most famous modern medical artists," whose "superb work enhances the value of medical books and journals and [whose] inspiration has led many artists into the important field of medical art. His long career as a specialist in visual education in medicine has made him an invaluable advisor on the subject."

Many Washington physicians will recall Professor Jones as one of the "headliners" at the Medical Society's Conference on Medical Teaching Technics last April.

Dr. John A. Reed has been reëlected Secretary of the American Diabetes Association and has been reappointed Chairman of the Association's Committee on Diabetes Dectection and Education. As Chairman of the latter committee, Dr. Reed will spearhead plans for Diabetes Week, November 16–22, which marks the opening of an intensive Nation-wide drive by the Association, its Affiliates and coöperating medical societies to find an estimated one million undetected cases of diabetes in this country.

JOHN A. REED, M.D.

Dr. Reed is Assistant Clinical Professor of Medicine at George Washington University School of Medicine and a consultant in diabetes for the U. S. Civil Service Commission and Doctors Hospital in Washington. He has long been active in the field of diabetes prevention.

Dr. Norman H. Topping, Associate Director of the National Institutes of Health, PHS since 1948, has been appointed Vice President of the University of Pennsylvania in charge of medical affairs, effective November 1.

Dr. Topping is noted, among other things, for the development of the first effective treatment for Rocky Mountain spotted fever. During World War II he was a consultant to the Army as a member of the U. S. Typhus Commission, a work that earned him the Typhus Commission Medal. From 1946 to 1948 he was assistant chief of the Institutes' division of infectious diseases. He held the rank of Assistant Surgeon General.

In his new position Dr. Topping will be the principal administrative officer of the University's whole medical program—the School of Medicine, Graduate School of Medicine, and the Schools of Dentistry, Veterinary Medicine, Nursing Education, Auxiliary Medical Services, and related hospitals and laboratories.

Dr. Topping is a member of many scientific organizations, including the American Medical Association, the American Public Health Association, American Society of Tropical Medicine (President, 1939), the American Epidemiological Society, and the Society of Experimental Biology and Medicine. He is chairman of the advisory commission on the World Health Organization's influenza program and an adviser to the National Foundation for Infantile Paralysis.

Three Washington institutions, **George Washington University School of Medicine, Georgetown University School of Medicine, and Gallinger Municipal Hospital,** are sharing in the **Lasdon Foundation research grants** of $264,424 for 1952. More than a score of institutions here and abroad are benefiting by the grants.

The Lasdon Foundation is a philanthropic organization established four years ago by the Lasdon Brothers, William S., Milton S., Stanley S., and J. S. Lasdon, to support research exclusively in the fields of medicine and health, an interest stemming from the Lasdon family's long affiliation with the pharmaceutical industry. The four brothers have been associated for many years in the Nepera Chemical Company, pharmaceutical manufacturers of Yonkers, New York. Dr. Morris Fishbein is one of the consultants to the Foundation on the making of grants and on research problems.

The Histochemical Society announces that in January 1953 they will begin publication of a bimonthly periodical to be known as the *Journal of Histochemistry and Cytological Chemistry.* It will be edited by Dr. R. D. Lillie, of the National Institutes of Health, Bethesda, Maryland. The subscription price is $7.50 per year. Publishers are the Williams & Wilkins Company of Baltimore.

The American Heart Association is also issuing a new publication in January, *Circulation Research.* It will be edited by Dr. Carl J. Wiggers, Professor and Director of the Department of Physiology, Western Reserve University School of Medicine, Cleveland; Assistant Editor will be Dr. Robert L. Alexander, Associate Professor of Physiology at the same institution. Subscriptions will be available directly from the publishers, Grune & Stratton, Inc., New York, at $7.50 per year.

Officers of the Acacia Life Insurance Company honored **Dr. John B. Nichols** on the anniversary of his 50th year with the Company at a luncheon at the Mayflower Hotel, August 1. Dr. Nichols has been Advisory Medical Director to Acacia since 1939 and for 37 years prior to that time was Medical Director. He became Acacia's first Medical Director on August 1, 1902, and laid the foundation for its present Medical-Underwriting Department.

In honor of the occasion Acacia's President Montgomery presented Dr. Nichols with a leather-bound testimonial signed by the officers of the Company. He was also the recipient of other fine gifts. Dr. Nichols was described as "physician, researcher, philosopher, author and, above all, a staunch and loyal friend."

At the Annual Meeting of the American College of Chest Physicians in Chicago in June, **Dr. J. Winthrop Peabody** was reëlected Chairman of the Council on Postgraduate Medical Education. On October 6, Dr. Peabody was moderator at the opening session of the Seventh Annual Postgraduate Clinic in Chicago, which was sponsored by the Council and the Illinois State Chapter.

Dr. Peabody was in Rio de Janeiro, Brazil, August 24–30, where he attended and participated in the meetings of the Second International Congress on Diseases of the Chest.

Dr. Frank J. Grabill has been appointed Area Consultant in Anesthesiology to the Veterans Administration in the Washington, D. C. area. His appointment fills the vacancy created by the resignation of Dr. Edward B. Tuohy, who moved to Los Angeles, California, to enter the private practice of anesthesia.

The Washington School of Psychiatry has received a grant of $25,000 from the Social Research Foundation, Inc. of New York City for a research project to be directed by **Dr. Frieda Fromm-Reichmann,** Chairman of the Council of Fellows in the School and Director of Research at Chestnut Lodge, Rockville, Md. Dr. Fromm-Reichmann's project will concern the treatment of schizophrenic patients by psychotherapy.

Dr. James Q. Gant, Jr. attended the Tenth International Congress of Dermatology, which was held in London, England, July 21–26, and participated in group discussions. He reported that 1,100 doctors were present from all over the world.

Dr. and Mrs. Gant left for Europe on June 1 and traveled through England, Wales, Scotland, Ireland and France. They returned the middle of August.

Theodore Wiprud, Secretary of the District Medical Society, flew to Denver, Colorado, September 8, to participate in the Annual Meeting of the Colorado State Medical Society at Estes Park. He addressed two sessions during the meeting, one on "The Doctor's Office—An Appraisal of Its Efficiency" and the other on "The Doctor's Investments—Planning For and Against Tomorrow."

On September 16 Mr. Wiprud was in Cincinnati, Ohio, where he was invited to address the Annual Meeting of the Cincinnati Academy of Medicine on "What Price Good Will."

Lt. Colonel Harry A. Horstman, Jr., who for the past three years has served as assistant chief of the medical service at Rodriquez Army Hospital, San Juan, P. R., has returned to Walter Reed Army Hospital, where he is Chief of its Outpatient Service. Colonel Hortsman received his degree in medicine from Georgetown University School of Medicine in 1942. He served in both the European and Asiatic-Pacific theaters during World War II and was a resident physician at Walter Reed in 1949. He is a diplomate of the American Board of Internal Medicine, an Associate of the American College of Physicians, and an Associate member of the District of Columbia Medical Society.

The Second National Conference on Placement of Severely Handicapped, sponsored by the American Federation of the Physically Handicapped, was held in the Willard Hotel, September 8, 9 and 10. Three members of the District Medical Society participated as panel chairmen during the meetings: **Dr. Francis M. Forster,** Professor of Neurology, Georgetown University School of Medicine, headed the Panel on Epilepsy; **Dr. Pearce Bailey,** Director of the National Institute of Neurological Diseases and Blindness, was Chairman of the Panel on Blindness and Visual Disabilities; **and Dr. Charles A. Hufnagel,** Assistant Professor of Surgery, Georgetown University School of Medicine, was Chairman of the Panel on Cardiovascular Disabilities.

Dr. Daniel F. Lynch, outstanding oral surgeon, was one of the special lecturers at the U. S. Naval Dental School in September. Dr. Lynch, who recently returned from attending the 11th International Dental Congress in London, spoke on "Observations on Technics in Oral Surgery." He described several new oral surgical technics which are being used in England. Dr. Lynch is an Associate member of the District Medical Society.

Dr. Frank S. Caprio was a guest speaker on the Martha Deane WOR radio program, September 2, which emanated from New York City. He was one of four psychiatrists who discussed the topic, "Keeping Love in Marriage." Dr. Caprio confined his discussion mainly to the problem of jealousy.

Dr. Sydney Ross and Dr. Stanley L. Blumenthal have been elected to fellowship in the American Academy of Pediatrics.

Dr. George A. Hardie, an Associate member of the Medical Society, has moved to Rochester, New York, where he will be associated with the Eastman Kodak Company. His office address is 343 State Street.

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additional current books which, in their opinion, merit comment.

Aureomycin Bibliography and Index, 1951 Edition. Pp. 319. New York: Lederle Laboratories Division, American Cyanamid Company, 1952.

Pharmacology in Clinical Practice. HARRY BECKMAN, M.D., Director, Departments of Pharmacology, Marquette University Schools of Medicine and Dentistry; and Consulting Physician, Milwaukee County General Hospital and Columbia Hospital, Milwaukee, Wisconsin. Price, $12.50. Pp. 839, with 152 figures. Philadelphia: Saunders, 1952.

Collected Reprints of the Grantees of the National Foundation for Infantile Paralysis, 1950. Vol. XI—Parts I and II. New York: National Foundation for Infantile Paralysis, 1952.

Culdoscopy: A New Technic in Gynecologi cand Obstetric Diagnosis. ALBERT DECKER, M.D., D.O.G., F.A.C.S., Clinical Professor of Gynecology and Obstetrics, New York Polyclinic Medical School and Hospital; Associate Attending Physician in Gynecology and Obstetrics, New York Polyclinic Hospital; Attending Gynecologist, Knickerbocker Hospital. Price, paper, $3.50. Pp. 148, with 50 figures. Philadelphia: Saunders, 1952.

Toxoplasmosis: Pathology of Neonatal Disease—Pathogenesis, Diagnosis and Treatment. JACOB KARL FRENKEL, M.D., PH.D., National Institutes of Health, Rocky Mountain Laboratory, AND SAUL FRIEDLANDER, M.D., Mercy Hospital, Sacramento, Calif. Price, paper, 50 cents. Pp. 105, plus 28 plates. Washington: U. S. Government Printing Office, 1951.

The Low Fat Diet Cookbook. DOROTHY MYERS HILDRETH AND EUGENE A. HILDRETH, M.D., with an Introduction by Francis C. Wood, M.D. Price, $2.95. Pp. 136. New York: Medical Research Press, 1952.

Living with Cancer. EDNA KAEHELE. Price, $2.00. Pp. 160. New York: Doubleday, 1952.

Physician's Handbook, 7th ed. MARCUS A. KRUPP, M.D., Assistant Clinical Professor of Medicine, Stanford University School of Medicine; Director, Palo Alto Medical Research Foundation, Palo Alto; NORMAN J. SWEET, M.D., Assistant Professor of Medicine, University of California School of Medicine, San Francisco; ERNEST JAWETZ, PH.D., M.D., Associate Professor of Bacteriology and Lecturer in Medicine and Pediatrics, University of California School of Medicine, San Francisco, AND CHARLES D. ARMSTRONG, M.D., Clinical Instructor in Medicine, Stanford University School of Medicine, San Francisco. Price, $2.50. Pp. 382. Los Altos, Calif: University Medical Publishers, 1952.

Sex After Forty. S. A. LEWIN, M.D., AND JOHN GILMORE, PH.D., with an Introduction by The Reverend Dr. Russell L. Dicks, Professor of Pastoral Care, Duke University. Price, $3.50. Pp. 200. New York: Medical Research Press, 1952.

The Treatment of Injuries to the Nervous System. DONALD MUNRO, M.D., F.A.C.S., Surgeon-in-chief, Department of Neurosurgery, The Boston City Hospital; Associate Professor of Neurosurgery, Boston University School of Medicine; Assistant Professor of Neurosurgery, Harvard University Medical School. Price, $7.50. Pp. 284, with 47 figures. Philadelphia: Saunders, 1952.

New and Nonofficial Remedies, Containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1952. Price, $3.00. Pp. 838. Philadelphia: Lippincott, 1952.

Gynecologic and Obstetric Pathology with Clinical and Endocrine Relations, 3rd ed. EMIL NOVAK, A.B., M.D., D.Sc. (Hon., Trinity College, Dublin; Tulane), F.A.C.S., F.R.C.O.G. (Hon.), Assistant Professor Emeritus of Gynecology, The Johns Hopkins Medical School; Gynecologist, Bon Secours and St. Agnes Hospitals, Baltimore; Fellow and Past President, American Gynecological Society. Price, $10.00. Pp. 595, with 630 illustrations, 19 in color. Philadelphia: Saunders, 1952.

Correlative Cardiology. CARL F. SHAFFER, M.D., F.A.C.P., Associate Professor of Clinical Medicine, Baylor University College of Medicine; AND DON W. CHAPMAN, M.D., F.A.C.P., Associate Professor of Medicine, Baylor University College of Medicine. Price, $9.50. Pp. 525, illustrated. Philadelphia: Saunders, 1952.

Veterans Administration Technical Bulletins. Series 10, Volume V, 1951, Washington 25, D. C.

Research in Endocrinology. AUGUST A. WERNER, M.D., AND ASSOCIATES. Edited by Al R. Schmidt, City Editor, Belleville Daily Advocate, Belleville, Ill. Pp. 285. St. Louis: Author, 403 Humboldt Bldg., 1952.

JAMES RAMSAY NEVITT, M.D.

(1867–1952)

Dr. J. Ramsay Nevitt, a Life member of the Medical Society of the District of Columbia, died August 30, 1952, at Cedarcroft Sanitarium, Silver Spring, Md., where he had been a patient for the past three years. Dr. Nevitt was District Coroner for 31 years and before the turn of the century had gained fame during a smallpox epidemic in Washington. After he retired he lived on a farm near Potomac Beach, Virginia, in the summer and with his daughter, Miss Ramsay Nevitt, at 3639 Van Ness Street, N.W., in the winter.

Dr. Nevitt was born, June 25, 1867, at Naylor's Hold, Richmond County, Virginia, the son of Robert K. and Mary Ramsay Nevitt. His father died when he was four years old. His mother, who had been a school teacher of note in Washington during the War of 1861, returned to Washington after her husband's death and reared and educated her son. She taught at the old Franklin School, then known as the Girl's Grammar School, the highest academy of its sort in the District.

Dr. Nevitt received his degree in medicine from Columbian (now George Washington) University, in 1892. In 1891 he was a student at Washington Asylum Hospital, now Gallinger Municipal Hospital, and on graduation became resident physician of the Hospital. In 1893 he entered the Police Department as a member of the Board of Surgeons and was made President of the Board in 1895. He also began private practice in 1893.

In the fall of 1894 an epidemic of smallpox shocked Washington. Although his approaching marriage to Miss Mary Hine had been announced, Police Surgeon Nevitt accepted the responsibility of caring for the stricken persons and stayed with them at the contagious disease hospital with only volunteer help until the last two patients were discharged early in December. According to an interesting biography of Dr. Nevitt, written by David Rankin Barbee (*Washington Post*, August 17, 1930), the doctor and Miss Hine were married in the First Presbyterian Church, December 19, for which "Washington turned out and filled the church."

For his outstanding services during the smallpox epidemic, Dr. Nevitt received acclaim through the local press, and the thanks and approval of the Board of Commissioners. Cognizance of his achievement through an item in the *Journal of the AMA* gave him national recognition.

From 1900 to 1931, Dr. Nevitt was District Coroner, an office he held longer than any other man. During that period of service he figured in two great tragedies, the Baltimore and Ohio railroad wreck at Terra Cotta station in December 1906, when 43 persons were killed, and the Knickerbocker Theater disaster in December 1921, when 97 persons lost their lives.

Dr. Nevitt gave freely and cheerfully of his services "to people who could not pay," a distinction from charity which he insisted upon. Some of them did pay him long afterwards, and in one instance he received unusual payment. Early in his practice he had attended a child during a serious illness. When President Wilson came into office, he was preparing to appoint a new coroner when the father of the child Dr. Nevitt had saved years before heard of the pending appointment and appealed in Dr. Nevitt's behalf. As a result Dr. Nevitt's tenure of office was not disturbed, but the experience taught him a lesson, and he was instrumental through a Commissioner friend in having Congress change the law, taking the appointment of coroner out of the hand of the President and placing it with the Commissioners.

Dr. Nevitt belonged to the American Medical Association, the Medical Society of the District of Columbia since 1893, and the Washington Medical and Surgical Society.

A member of the Washington Heights Presbyterian Church, he was deeply religious. During the smallpox epidemic one of his Negro patients died; since there was no minister to bury the dead, he read "the burial service from a prayer book he always carried with him."

His wife, Mrs. Mary Hine Nevitt, died in 1948.

His daughter, Miss Nevitt, survives him together with a son, Leman H. Nevitt, 3121 Patterson Street, N.W.

ROBERT SOMERWELL BEALE, M.D.

(1876–1952)

Dr. Robert S. Beale, a practicing physician in Washington for almost fifty years and a Life member of the Medical Society, died, August 2, 1952, at his home, 1318 19th Street, N.W. He retired from the general practice of medicine two years ago.

Dr. Beale was born into an old Washington family which had resided in the District of Columbia since 1809. His father was a physician, Dr. James Sheilds Beale; his mother, Mrs. Fanny Sawyer Marbury Beale. His early education was obtained at Friends School, Emerson Institute, and Bellevue High School, Va. He received his medical degree from Columbian (now George Washington) University in 1900, and interned at Emergency Hospital the following year. He was licensed to practice in the District of Columbia in the fall of 1900.

Dr. Beale was on the active staff of Garfield Memorial Hospital for 25 years and a member of the consulting staff until his retirement. He taught at Georgetown University School of Medicine for 15 years, and was Clinical Professor of Medicine Emeritus at the time of his death. For many years he was medical examiner for the Capital Transit Company. He was a charter member of the Hippocrates-Galen Medical Society and an honorary member of the Louis Mackall Medical Society. He became a member of both the Medical Association and the Medical Society of the District of Columbia in 1902 and a Life member of the Society in 1943. He was a member of the American Medical Association.

He had long been an active member of Christ Episcopal Church, Georgetown, of which he was a former vestryman. He also had served as President of the Georgetown Assembly.

Surviving are his wife, Mrs. Sophie Clarkson Stuart Beale, and three daughters: Mrs. William H. Leahy, Norfolk, Va.; Mrs. John F. Bennett, 3702 Morrison Street, N.W.; and Mrs. Richard C. Marshall III, 202 Primrose Street, Chevy Chase, Md.

JOHN CARL ECKHARDT, M.D.

(1889–1952)

Dr. John C. Eckhardt, pediatrician, and Director of the Bureau of Preventable Diseases of the District Health Department, died, September 1, 1952, at Sibley Hospital. His home was at 1834 Irving Street, N.W.

Dr. Eckhardt was a native Washingtonian, born September 16, 1889. His parents were Nicholas and Sarah Jane Hysatt Eckhardt. He attended old Business High School and Emerson Institute, and received his medical degree from George Washington University in 1912. He interned at George Washington and Casualty Hospitals in the District of Columbia and at Petersburg (Virginia) Hospital.

He first practiced in Sanbornville, New Hampshire, from 1915 to 1917. During World War I he served in the Army Medical Corps. Following the War, he returned to Washington to practice, limiting his practice to pediatrics since 1946. He was on the staff of George Washington, Casualty, Children's, Gallinger and Sibley Hospitals. At one time he was head pediatrician at Sibley Hospital.

Dr. Eckhardt joined the staff of the District Health Department in 1936 on a part-time basis and became a full-time staff member three years later as medical officer in epidemiology. He was appointed Director of the Bureau of Preventable Diseases in December, 1950.

Dr. Eckhardt was elected to Active membership in the District Medical Society in 1920. He was a member of the American Medical Association, the George Washington University Medical Society, and member and Past President of the Washington Medical and Surgical Society.

His wife, Mrs. Ruth Mason Tappan Eckhardt, survives him together with two sons and a daughter: John C. Eckhardt, Jr., of Rockville, Md.; David R. Eckhardt, 1706 15th Avenue, Hyattsville, Md.; and Mrs. Nicholas Petro, Santa Ana, Calif. He also leaves a brother, Nicholas Eckhardt, Jr., 1212 Holly Street. N.W.

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SUBARACHNOID HEMORRHAGE COMPLICATING PREGNANCY

Report of Four Cases

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THE first case of subarachnoid hemorrhage to be reported was a brief account of the postmorten findings published by Wilks[1] in 1859. Bramwell[2] in 1886 described the disease, and since that time subarachnoid hemorrhage has been established as a definite clinical entity, found to be relatively common. It rarely occurs, however, as a complication of pregnancy, labor, or the puerperium. Jerome Schwartz[3] reviewed the world literature, found only 32 cases of subarachnoid hemorrhage complicating pregnancy, and reported 3 additional cases in September, 1951. Two other cases, 1 proven by arteriogram, and a fatal case proven by autopsy, occurred at other Washington, D. C. hospitals in September, 1951. It is the purpose in this paper to report 4 more cases, occurring at Garfield Memorial Hospital, in all of which the patients survived.

PATHOLOGIC ANATOMY

The brain has three coverings or meninges. From without inward there is, first, the dura, a tough membrane adjacent to the skull, with only a potential space between the membrane and the bone. Hemorrhage occurs here only following trauma and is mentioned in this connection only to be dismissed. Next there is the arachnoid, an avascular membrane lying adjacent to, but not adherent to the dura, separated from it likewise by a potential space. The arachnoid floats above the brain on the cerebrospinal fluid, is closely approximated to the dura, and is connected to the brain by trabeculations. The space between the arachnoid and the brain, in which the cerebrospinal fluid circulates, varies in depth, being deeper at the base of the brain and in the lumbar region of the spine. In this space blood vessels travel to and from the brain, some traversing the space for a distance of 2 to 4 cm. The innermost layer, the pia, is adherent to the brain substance and is penetrated by blood vessels from the subarachnoid space.

Two types of aneurysms are to be distinguished. First is the small "berry" type,[4] pedunculated in appearance, and occurring at the point of bifurcation of blood vessels. These aneurysms are found in 0.3 to 1 per cent of all routine autopsies.[5] Frequent defects are found in the media of cerebral vessels at their bifurcation or at the origin of a branch. In none of the aneurysms studied could muscle be demonstrated in the wall of the sac. A difference of opinion exists as to the origin of the lesions. Bremer,[6] basing his opinion on embryologic studies, concluded that aneurysms are congenital in their development and are already existent in the embryo at birth. Forbes[7] believes that the lesions are acquired and are dependent on a congenital defect in the muscularis at the points of bifurcation and subsequent degeneration of the internal elastic membrane due to continued overstretching by the force of blood pressure.

Another type of aneurysm forms in arteriosclerotic vessels due to the deposition of atheromatous plaques in the vessel wall. Dissection of blood into the weakened area of the wall produces a "fusiform" type of aneurysm. Since it occurs in older age groups it is seldom to be confused with the aneurysm to be considered in pregnancy.

Aneurysms do not occur in the substance of the brain but are usually situated at the base of the brain and arise from one of the vessels making up the circle of Willis. Here the vessels are essentially suspended in fluid with little external support and may rupture easily under the impact of trauma from increased systolic blood pressure or physical exertion.

The site of the hemorrhage is important in determining the resultant symptoms. Because of the close proximity of the third, fourth, fifth, and sixth cranial nerves to the circle of Willis in a part of their course, hemorrhage from an aneurysm in this area can easily produce oculomotor paralyses, double vision and trigeminal pain. Facial palsies may follow hemorrhage into the facial nerve sheath. Aching in the legs and back may occur with seepage of blood into the spinal subarachnoid space. Pressure against the pyramidal tracts can produce paralysis of the extremities of the opposite side. Increased intracranial pressure may give nausea and vomiting.

ETIOLOGY

In the general consideration of subarachnoid hemorrhage, aside from its occurrence as a complication of pregnancy, various diseases and complications have been suggested as etiologic factors. Among these are infections, toxic conditions including alcoholism, lead poisoning and toxemia of pregnancy, and vascular lesions such as arteriosclerosis and aneurysms. Syphilis is rarely an etiologic factor, since it causes an obliterative endarteritis rather than a weakening of the media of the smaller arterioles. It has been suggested that migraine-like headaches may be due to congenital aneurysm.[8] Correct diagnosis of cerebral aneurysm during the life of the patient is difficult, and in only those with intermittent leakage or rupture is diagnosis possible.

In regard to subarachnoid hemorrhage associated with pregnancy, hypertension is the most usual complicating factor. Parks and Pearson[9] reported 1,009 cases of late toxemia of pregnancy and found subarachnoid hemorrhage in all 4 of those who died with eclampsia. The question arises as to the use of oxytocics in labor and following delivery. Parks states that in all toxemias there seems to be a definite contraindication to the use of pituitrin because of its vasopressor and antidiuretic effect. In another series[5] 1 patient who developed subarachnoid hemorrhage had received ergotrate and pitocin before the onset of the hemorrhage. Also, 3 patients of still another series[10] had received pituitrin, ergonovine or gynergen before the episode of hemorrhage. Though few references are found regarding the proven harmful effect of oxytocics, one might conclude that they should be used cautiously, especially in cases with elevated blood pressure or a history of migraine.

The precipitating factors in the period before the onset of the hemorrhage have been reported by some as various forms of exertion, such as tossing a baby in the air, straining at stool, and frequently sexual intercourse. However, the majority of patients feel perfectly well and are engaged in ordinary activity when the rupture takes place.

DIFFERENTIAL DIAGNOSIS

Subarachnoid hemorrhage occurs in younger people and is characterized by sudden severe headache, delayed loss of consciousness and late signs of paralysis. Two clinical phases are commonly observed. First, there is the sudden onset of pain in the head, many patients complaining of feeling a "snap" in the head followed by an intense throbbing headache. Vomiting usually occurs, followed by stupor or coma, depending on the extent of the area involved by the hemorrhage. Stiffness of the neck is a diagnostic sign, and there may be pain and tightness in the backs of the legs and thighs. Bradycardia, sweats and chills may occur. Convulsions may result, with delirium, hemiparesis or hemiplegia, diplopia, hemianopsia, or facial pain. The reflexes are usually abolished on the side of the hemiplegia. If the patient does not die, the condition progresses with signs of a secondary meningeal syndrome. The blood in the subarachnoid space acts as an irritating factor producing meningismus. Headache persists, and nuchal rigidity, positive Kernig's sign, slight leukocytosis, and low-grade fever may develop.

A pathognomonic sign of subarachnoid hemorrhage is the finding of bloody spinal fluid, usually under increased pressure. In cases in which a vessel is accidentally punctured in the course of a spinal tap, the fluid will be bloody, but each succeeding tube will become clearer. In subarachnoid hemorrhage the fluid is uniformly bloody and after the first day becomes xanthochromic.

Primary subarachnoid hemorrhage must be differentiated from intracerebral hemorrhage and cerebral thrombosis. Subarachnoid hemorrhage differs in the presence of pronounced meningeal signs and paralysis of the extrinsic ocular muscles. Patients with subarachnoid hemorrhage are usually relatively young, the blood pressure is normal, and there is no clinical evidence of arteriosclerosis. In contrast, intracerebral hemorrhage and thrombosis usually occur in older people.

Meningitis can be confused with subarachnoid hemorrhage, since both give headache, fever, stupor, neck rigidity, positive Kernig's sign, and leukocytosis. However, in meningitis the onset is not so sudden, and the spinal fluid is cloudy and not bloody. Fever and leukocytosis are more marked in meningitis, and the patient is usually more irrational.

Brain tumors may give choked discs but do not produce bloody spinal fluid.

The diagnosis of subarachnoid hemorrhage complicating pregnancy and delivery may be obscured by other conditions, such as shock, anesthesia, and preëclampsia. Headaches developing in patients who have been delivered under spinal anesthesia may be confused with the prodromal headaches of subarachnoid hemorrhage. Toxic patients with convulsions present a diagnostic problem. However, the presence of uniformly bloody spinal fluid, together with the failure of improvement under the accepted methods of treating eclampsia should make one think of subarachnoid hemorrhage. As a rule, sedation and dehydration will clear up all but the most severe toxemias and will have only minimal effect on subarachnoid hemorrhage.

Arteriograms should be made after the spinal fluid becomes clear, usually 10 to 12 days after the initial episode. A normal arteriogram does not rule out subarachnoid hemorrhage.

PROGNOSIS

The mortality quoted in different series of cases varies from 28 to 50 per cent,[11] the average being 29 per cent in the first episode, 14 per cent during the current episodes between the second and fourth week, and 5 per cent by the end of the first year. In those patients who survive the first attack of bleeding the threat of recurrent hemorrhage is always present. The real danger period is the first month, and patients who survive the first year have a good chance of relatively long life.

The presence of coma adds to the gravity of the prognosis, 86 per cent of the patients dying when unconsciousness supervenes.

TREATMENT

Sedation, bed rest, and avoidance of all excitement are essential. Lumbar puncture should be used only for diagnosis. When done in the early stage of the disease it relieves the headache by decreasing the spinal fluid pressure. However, this reduction in spinal fluid pressure may increase the tendency to bleed. Later, daily lumbar puncture may be done to remove the bloody spinal fluid, a source of irritation to the meninges. The fluid should be removed slowly. Opiates are contraindicated because of the danger of respiratory failure as in all cases of increased intracranial pressure.

If labor supervenes, the second stage should be shortened by reasonable means. Employment of Cesarean section avoids the trauma of labor, decreases intra-abdominal pressure with resulting stagnation in the dilated splanchnic vascular bed, blood volume and venous pressure, and hence intracranial pressure.

Patients who survive the first month should be subjected to bilateral arteriography and subsequent craniotomy if an aneurysm is visualized.

REPORT OF CASES

Case 1. Mrs. R. B. H., a white primigravida, 26 years old, due to deliver October 7, 1951, was admitted to the hospital at 2:05 p.m. on October 1, 1951 at 39 weeks' gestation. She was first seen by her doctor on February 21, 1951. Her physical examination then and her subsequent prenatal course were entirely normal throughout. She was Rh negative, gave no history of blood transfusions, and showed no development of anti-Rh antibodies during her pregnancy. Her total weight gain was 25 pounds. Urinalysis was negative on each of her 14 prenatal visits, no albumin being present at any time and the specific gravity varying from 1.010 to 1.022 with an average of 1.012. In July the patient developed pitting edema of the ankles and feet, which quickly responded to diet and the administration of ammonium chloride. The blood pressure was normal at all times.

On October 1, 1951 the patient was examined by her doctor prior to her admission to the hospital. The blood pressure was 122/70, the weight 125 pounds, and the fetal heart rate 140 in the left lower quadrant. There was slight pitting edema of the ankles, and the urine was negative for albumin, with a specific gravity of 1.016. Pelvic examination showed the vertex to be at plus 1 station, the cervix to be very soft, 4 to 5 cm. dilated and 90 per cent effaced. She was admitted to the hospital to have a medical induction of labor, for which 2 enemas and 2 minims of pitocin were used. The patient went into very active labor, and, on her arrival at the delivery suite, the membranes ruptured spontaneously. Examination showed the cervix to be fully effaced and dilated and the head at plus 2 station. She was given 0.3 Gm. of seconal by mouth, 100 mg. of demerol by hypodermic, and 250 mg. of sodium nembutal intravenously at that time but remained restless. Within 18 minutes she was taken to the delivery room for an easy low forceps delivery with perineotomy at 6:18 p.m. Vaginal bleeding was slightly more than normal before delivery, and for this reason, together with the short labor, an intravenous infusion of 500 c.c. of 5 per cent glucose in distilled water was started before delivery. Ergotrate, 1/320 grain, was given intravenously at the time of the delivery of the infant's shoulders and was repeated 2 hours and 6 hours after the delivery.

The patient's blood pressure had been 130/80, with the respiratory rate 20 and the pulse rate 70 per minute on admission. During the delivery the anesthetist recorded the systolic blood pressure as 170, then 160, and finally 190 at the end of the anesthesia. After the delivery the blood pressure varied from 160/80 to 190/100, and at 8:00 p.m., 1 hour and 42 minutes after the delivery, it was 200/110. The patient was given morphine sulfate, 1/4 grain 2 hours after delivery, and 2 hours later the pressure had dropped to 140/75 and the patient's condition was thought to be satisfactory. However, she had not reacted from the anesthetic by 6 hours after delivery and respiratory difficulty from the presence of mucus in her throat was noted. Her jaws were clamped together, as is frequently seen in patients just before they recover from anesthesia. Her blood pressure was 150/105 and there was slight twitching of the left arm and shoulder and possibly the jaw. Her abdomen was distended, and examination showed the patient still unresponsive except for slight change in breathing on pressing on the fundus. Respirations were sighing, with moaning expiration, the corneal reflex was present, the blood pressure was 150/105, and the pulse rate was 80 per minute. Sodium luminal, 2 grains, was given at that time, and an oxygen machine and an aspirator were taken to the patient's room. A Levine tube was inserted through the nose into the stomach and a moderate amount of fluid obtained.

Seven hours after delivery the patient had her first convulsion, which was a Jacksonian type of seizure starting in the flexors of the left wrist, spreading to the left shoulder and neck and subsiding in the elapsed time of about 3 minutes. Sodium nembutal, 250 mg., was given intravenously, oxygen was started, and a retention catheter was placed in the bladder. The blood pressure varied from 138/98 to 122/98, and 5 hours after the first convulsion another convulsive seizure occurred which lasted 6 minutes. Sodium nembutal, 250 mg., was repeated intravenously, and 2 c.c. of 50 per cent magnesium sulfate was given intramuscularly. The patient remained in deep coma and from that time on was treated as a case of severe eclampsia complicated by intracranial hemorrhage.

A spinal tap was done the following morning and showed a normal spinal fluid pressure. The fluid was xanthochromic and contained 500 red blood cells per cu. mm., no leukocytes, 130 mg. of protein, 73 mg. of sugar, and 702 mg. of chlorides. The colloidal gold curve was normal. At that time the patient was still comatose, her breathing was stertorous, the blood pressure was 120/100, the respiratory rate was 20, and the pulse rate was 74. Her pupils were equal, miotic, and did not react to light. There was no nuchal rigidity, the deep reflexes were sluggish, and the plantar reflexes were absent.

On the morning of the second postpartum day pressure on the fundus elicited response, the patient moving her right leg and arm. Her pupils were still miotic, the eyeballs were stationary, the blood pressure was 120/80, the pulse rate was 60, and the respiratory rate was 12. The urinary output was adequate, and the urine showed only 30 mg. per cent of albumin. The blood nonprotein nitrogen was 49 to 50 mg., and the blood chloride was 478.

The patient's condition improved gradually, and by the fourth day she was fully conscious and answered questions readily but had a left hemiplegia. The Babinski sign was positive on the left, the blood pressure was 145/100, and the pulse rate was 75. The patient's temperature was up to 100.4°F. rectally on the first postpartum day and 100°F. on the second and fourth days but was normal after that time. By the sixth day the patient had regained complete use of both her upper and lower extremities on the left, and by the seventeenth day after the onset of her illness she had only patchy transient numbness on the left side, frequent right frontal headaches, and slight numbness of the left upper lip. Her examination was negative except for mild left facial weakness and hyperactive reflexes on the left. A right carotid arteriogram was made and showed normal position of the cerebral vessels and no lesion. The neurologist's diagnosis was subarachnoid hemorrhage with probable rupture into the right temporal lobe.

The patient was discharged in good condition on October 21, 3 weeks after her delivery and to date has had no recurrence of symptoms. This case illustrates the masking of symptoms by anesthesia, the possibility of confusion with eclampsia, and the failure of improvement under approved methods of treating toxemia. Oxytocics were employed but not in dosage in excess of ordinary usage.

Case 2. Mrs. D. D., a 26-year-old white woman, gravida 2 and para 1, was delivered by low forceps of a living female infant weighing 8 lbs., 14 oz. on August 18, 1948, at 42 weeks' gestation. Her delivery, blood pressure, and postpartum course were normal until August 26, when she complained of headache and generalized discomfort, followed an hour later by severe pain in the back of her head and neck. The occipitofrontal headache persisted, and the following day the patient became confused and developed a grade 1 nuchal rigidity. Reflexes were normal, and the pulse rate varied from 60 to 70 per minute. By 6:00 p.m. that day the nuchal rigidity had increased to grade 4, the Babinski sign was positive on the right, and the temperature was elevated to 100°F. No Kernig's sign was present. A spinal tap was done and the fluid, which was under no apparent increase of pressure, was diffusedly bloody and remained so throughout a total of 10 to 15 cu. mm. withdrawn. Smears showed many red blood cells, a few white blood cells, and no organisms.

Repeated spinal taps were done with marked subjective relief. By August 31 the mental confusion had cleared and no pathologic reflexes were present. On September 1 the patient complained of paralysis of her left arm, but no objective signs of paralysis were present. The left pupil was larger than the right, abdominal reflexes were absent, and the deep reflexes were bizarre, changeable, and generally more active on the left, the allegedly paralyzed side. By September 8 the patient was symptom-free and was discharged clinically well.

Her temperature had been elevated from 99.4 to 101.4°F. during the first 7 days of the illness, after which it remained normal. Leukocytosis was present up to 11,500. The urine showed a trace to 1 plus sugar but no albumin.

This patient has had no recurrence and has since delivered normally without complication.

Case 3. Mrs. M. A., a 36-year-old white primigravida, due to deliver December 3, 1944, was admitted to the hospital on July 14, 1944, at 20 weeks' gestation. Three days before admission she was taking a shower, when she suddenly felt a paralyzing pain in her left temple and down the left side of her face to the neck. The pain quickly spread to the right side of her head and down both sides of her neck. Immediately afterwards she became nauseated and vomited frequently after that time. She began to have double vision on the day of admission but could see normally if she closed one eye.

Examination showed the patient to be lethargic, responding intelligently to questioning, but appearing sleepy, even though she had had no sedation. Her pupils were equal and reacted to light but not to accommodation. Nuchal rigidity was present, and there was slight lateral nystagmus. Her extremities were weak and flaccid, but both the deep and superficial reflexes were normal. Plantar and abdominal reflexes were absent, the ocular fundi were normal, and Kernig's sign was negative. A spinal tap showed grossly bloody spinal fluid which was xanthochromic on centrifuging. The spinal fluid pressure was 12 mm. Hg with a rise to 16 mm. Hg on jugular compression. Only one other spinal tap was done, July 29, and this showed clear fluid. The urine showed 10 mg. of albumin and no leukocytes. The patient's temperature was not elevated above 99.4°F. and was normal after the fourth hospital day.

The patient was discharged in good condition on August 12, 1944 and has had no recurrence. She was delivered by Cesarean section on December 11, 1944, the indication being the previous subarachnoid hemorrhage and also questionable placenta previa.

Case 4. Mrs. Z. S., a 24-year-old white primigravida, due to deliver December 12, 1942, was admitted to the hospital on December 5 and was delivered of a stillborn hydrocephalic infant on December 7 by craniotomy and perineal repair. Her postpartum course was stormy and was complicated by bronchopneumonia and perineal infection, with the development of a rectovaginal fistula. An ulnar palsy was also present on the left side when she was discharged on December 24, 1942. On January 4 she was talking to her husband on the telephone when she staggered into the adjoining room complaining of an agonizing pain in her head, particularly in the region of the right eye and temple, associated with near blindness. When seen by her doctor 45 minutes later she was afebrile, pallid with slight cyanosis, and rational, but with neck rigidity, Cheyne-Stokes respirations, and a pulse rate of 60. The reflexes were normal, and there was no strabismus, diplopia, or nystagmus. The Kernig's sign was positive. Four days later the headache persisted, diplopia had developed, and there was further retraction of the neck. A spinal puncture gave profusely bloody spinal fluid with a pressure of 22 mm. Hg, falling to 8 mm. Hg after the removal of 15 c.c. of fluid, producing considerable relief of the headache. The patient's blood pressure was 150 systolic initially, gradually falling to 130/80. By January 21 she had completely recovered, but a second attack occurred 6 months ago, after she had moved to another city.

The diagnosis of the neurologist in charge of the case was that of a subarachnoid hemorrhage due to a rupture of a small aneurysm near the right anterior cerebral artery.

SUMMARY

The anatomic description, etiology, symptoms, differential diagnosis, prognosis, and treatment of subarachnoid hemorrhage have been discussed, and 4 proven cases, in all of which the patient survived, have been presented. This clinical entity is probably encountered in pregnancy more often than reported, and, by keeping it in mind, more correct diagnoses will be made.

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MESODERMAL POTENTIALS

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THE tremendous potential power of mesodermal tissue is not appreciated. Even after many years of study and observation, it becomes more difficult to grasp the full significance of this power and the potentials that are profoundly buried within it.

During embryonic life it displays a most unique and unparalleled activity. Out of the undifferentiated mass of embryonic cells is derived the ectodermal covering, on the outside of the body, and the entodermal lining on the inside. In it we also see displayed the unexplained process of differentiation which ultimately terminates with the various tissues which go to make up the framework of the body.

In addition to this, it goes a bit further with its seemingly unlimited power, for it also differentiates into all the important tissues which are very vital and important to the coördinated normal economy of the entire body. Of these the cortex of the adrenal is, by far, one of the most important. With the recent discovery of cortisone it becomes even more important to call attention to some observations which are not generally understood or appreciated.

For years the cortical portion of the adrenal has been divided into three zones; the outer zone is known as the zona glomerulosa, the middle zone, as the zona fasciculata, and the inner zone, as the zona reticularis.

It has been only within recent years that specific functions have been suggested for these various zones. The outer zone is believed to furnish the necessary hormones for the control of normal balances of various electrolytes throughout the body. The middle zone is believed to furnish the hormone necessary for normal carbohydrate metabolism. The inner zone is said to furnish gonadotropic hormones. All three zones, however, are under the direct controlling influence of the pituitary.

Which of these zones furnishes the hormone known as "cortisone" is not clear. Whether it is derived from one or all three layers is not known.

It is well known that the cells of the cortex are not permanent in their existence, but are constantly being replaced. The cells of the zona glomerulosa are the most immature. They arise by a process of differentiation from the cells of the adrenal capsule, which is a mesodermal structure. Immediately beneath the capsule they group themselves into small, solid masses. Frequently these masses are seen in the center of the capsule or even on the periphery. Here they continue to grow and in time form nodules which are commonly referred to as "cortical adenomata" or "nodular hyperplasia." Actually, however, they are normal cortical cells slightly out of normal position. By further growth, the groups of cells immediately beneath the capsule in time become larger by cytoplasmic growth and assume a glomeruloid appearance. From this the zona derives its name. As more cells are laid down beneath the capsule, those in the glomeruloid shape are slowly pushed further inward. When these reach the middle of the cortex they arrange themselves into indefinite cords or fascicles. From this arrangement the zona derives its name. Because of the close proximity of these cords they very often present the appearance of tubular formation. As capsular growth continues, the above cords of cells eventually reach the innermost portion of the cortex where they lose their cordlike arrangement and appear to be lying free without any definite pattern of arrangement. Here they are limited on the inside by the medulla and appear to be separated by numerous vascular spaces. In fact, the zona reticularis is the most vascular area of the entire gland. Here, also, the cells in time undergo complete disintegration and their products are removed by absorption.

The life span of the individual cortical cell from the time of origin from the capsule and complete disintegration is not definitely known. In animals it is said to vary from 6 to 30 days. Nor is it known how these cells assume different functions in their different positions, providing, of course, we admit that they do have different functions as they lie in the three different zones.

Does cellular division take place in these cells during their migration from the capsule to the medulla? Evidence in the literature is very meager, indefinite and equivocal. Textbooks avoid the issue. From my own experience, over a period of many years, I must confess I have seen only suggestive evidence of mitosis in normal cortical cells. I have, therefore, been led to conclude that most of the cortical cells are derived from the mesodermal capsular cells by a process of differentiation.

Therefore, it becomes apparent that our ideas concerning adrenal dysfunctions should also include consideration of the adrenal capsule. Certainly it is quite within the realm of possibility that the entities known as atrophy and hypertrophy of the adrenal cortex could very well be explained by capsular dysfunction.

Also, admitting that there are different functions assumed by these cells in their course of migration, it can be admitted that distortion of function at any level can readily occur, and that treatment should be directed toward substitution therapy, if possible, with the hope that capsular regeneration in time will correct the condition.

A further fascinating display of potential power of the mesoderm is confined entirely to the female and is believed to be associated with hormonal cycles. Here, I refer to the condition commonly known as endometriosis. It is a known fact that embryologically the endometrium of the uterus is a derivative of the celomic mesothelium. This, of course, is a mesodermal structure, which through its powers of maturation and differentiation becomes the endometrium with its glandular and stromal component.

Admitting, therefore, that the above statement is a well established embryologic fact, isn't it quite logical to assume that the potential power is also present in the remaining portions of the celomic mesothelium, which in the adult becomes what is commonly known as the peritoneum?

Thus, it becomes obvious that the cells of the peritoneum can at any time assume similar embryologic characteristics and under suitable environmental conditions develop glands and stromal tissue similar to those of the endometrium. By so doing the condition of endometriosis is produced.

This is no new concept. Meyer, Novak[1] and others have suggested this as a more logical explanation for the condition which for so many years has been ascribed to Sampson's theory of misplaced uterine endometrium. Certainly, with the latter theory it is difficult to explain the presence of endometrial-like tissue in such completely isolated areas as the umbilicus ane femoral and inguinal canals.

This unexplainable transformation of the mesodermal peritoneal cell into a specific glandular cell is commonly described as "metaplasia." But metaplasia by simple definition simply refers to the change of a cell from one type to another without explaining why or how. The answer can only be found in appreciating the tremendous potential power residing in all mesodermal cells, without which there can be no uniformity of tissue growth.

The kidney, with its normally formed renal units, again presents evidence of further mystifying powers of the same mesodermal tissue.

It is a known and admitted fact that the renal units and the kidney as a whole are derived from the undifferentiated mass of mesodermal cells known as the mesonephric ridge. Whether all renal units are completely formed at the time of birth is open to question. Histologic evidence suggests that there is considerable differentiation of the renal capsular cells into glomerular structures long after birth.

Microscopic study of sections from newborn infants shows varying stages of glomerular differentiation in the peripheral part of the cortex just beneath the capsule. Where and how these structures unite with their respective tubules is not apparent.

The numerous functions performed by the various parts of a renal unit, many of which still seek an explanation, are evidence in themselves of a power which is not apparent in the terms "metaplasia" and "differentiation."

Once the kidney reaches maturity it no longer shows any apparent evidence of glomerular formation or regeneration from the capsule. Life of the individual is now maintained by normal functioning of the units which have been previously developed. Fortunately for us, the number of units present in both kidneys is far in excess of what is needed to maintain the normal life of an individual. As life goes on, however, one unit after another is lost, either by direct injury or indirectly by vascular interference, and yet the normal life of an individual can go on unabated.

The assumption of the additional load of work by the remaining renal units again displays further evidence of a potential power which is commonly explained as a "compensatory mechanism." Just how much additional work an individual unit can assume without reaching a level of failure is, of course, unknown.

The ovary, with its numerous follicles and stromal tissues, is undoubtedly one of the most intriguing organs of the human body. The development of the egg from the surrounding germinal epithelium, which is a differentiated product of mesodermal tissue, not only displays a mystifying process of metaplasia but also a force or power which at present is without description. The amazing progressive activity of the thecal cells and their overseeing nursemaid activity to the growing and maturing ovum displays a more profound potential power than is implied in the term "process of follicle formation."

The conversion of the granulosal cells to the hormone-producing lutein cells again displays an inherent activity that is hardly adequately explained by acknowledging the existence of a pituitary luteinizing hormone.

The testicle, which is analogous to the ovary from the standpoint of origin, again displays that incomprehensible potential when it produces the seminiferous tubules from its tunics. The apparent unlimited capacity of production of each seminiferous tubule is further evidence of unlimited powers of differentiation of mesodermal tissues. The interstitial cells and the cells of Leydig are again evidences of specialized differentiation from the same fundamental tissue.

To imply that this process is based entirely upon hormone control is to admit a tremendous hiatus in our knowledge.

Since the sperm and egg are mesodermal derivatives, it naturally follows that the entire body is of similar origin.

Although embryologically the body is described as arising from three layers, the ectoderm, entoderm and mesoderm, it must be understood that these are purely descriptive terms referring to location. Actually, however, they are all products of differentiation of the same fundamental embryologic tissue.

What, then, is the controlling power which leads to the ultimate differentiation of all tissues? Is it a hormonal substance? Is it environment? Is it a highly specialized chemical reaction? It is quite possible that all of these may play a part in the process. At present we must admit that mesodermal tissues are imbued with a tremendous potential power which is beyond comprehension. Without such admission it is difficult to explain the formation of any tissue and the body as a whole.

Admitting that this is so, it becomes more apparent how mixtures of tissue can occur in locations where they do not normally belong. This is especially true in tumor formations. Again, it becomes more comprehensible how a mesodermal cell may assume any of its embryologic functions and digress along an entirely new line of differentiation from which it was originally intended.

Thus, it becomes further apparent that more research and study of this potential power is necessary before we can understand many of the complicated processes which today are entirely unknown.

Admitting that mesodermal tissue is fundamentally a differentiated mesenchyme tissue and that the latter is an undifferentiated embryologic tissue, such as may be seen in the gastrula stage of the embryo, one must logically admit that this is the tissue that differentiates into bone, cartilage, muscle, fat, epithelial tissue, and all other tissues of the body.

The ectoderm and entoderm are both products of differentiation of this most embryonal tissue which we refer to as mesenchyme. The former we know forms the outer covering of the body which we call epidermis, and the latter we know forms the mucosa of the intestinal canal and the main functioning portions of all glands which are attached to it. Isn't it an amazing fact, quite without logical explanation, that the secretory cells of the liver embryologically arise from the cells of the embryonic intestine? And yet the multitude of functions assumed by these cells in their various locations thus far defies all explanation.

The various derivatives of the ectoderm, such as sweat glands, sebaceous glands, mammary glands, and other apocrine glands, which are characteristic for the female and male species, and the various products derived from these glands are unquestionably different and again defy a satisfactory explanation.

The eye and portions of the ear are described as derivatives of the ectoderm, but can a satisfactory explanation be found in stating that the lens of the eye and the retina come from the same embryologic tissue without becoming entirely mystified and confused when attempting to explain why and how these different parts assume such highly specialized functions?

It is quite within the realm of possibility, therefore, that tumors composed of mixed elements may have a single cell as their point of origin or each element of the tumor may have its own separate point of origin.

It is conceivable, but highly doubtful, that any cell of the body can, in itself and by its own power, revert to a more embryonic form.

For years it has been taught, and quite generally admitted, that carcinomata have their origin in epithelial cells. Sarcomata, on the other hand, are believed to have their origin in mesodermal elements. At first glance this would seem to be a logical statement. Cohnheim's theory of tumor origin based on cell remnants or embryonic cell rests is also logical. Unfortunately, however, nobody to the present time has ever seen these rests or definitely proven these statements.

Since all normal tissues of the body are derived from the fundamental embryonic tissue, known as mesenchyme, isn't it logical to hypothecate that this same tissue may, under abnormal circumstances or unusual stress, give rise to an abnormal cell?

A close study of the malignant cells, in areas adjoining connective and mesenchymal elements, gives one the impression that the malignant cells are arising from this connective tissue, in spite of the fact that histologically it has a benign appearance.

It is quite possible that all tumors, whether benign or malignant, are derived, not from matured epithelial or mesodermal cells, but by a process of metaplasia from the mesenchymal tissue of the body.

I am inclined to believe that this is so. However, this again presupposes the admission of a potential embryonic power residing in the mesenchymal cell. It would further suggest that the cause for the sudden metaplastic manifestation is an intracellular metabolic disturbance within the mesenchymal cell and is undoubtedly related to some unknown chemical disturbance.

Judging from the literature, this apparently is no new concept. As early as 1852, Virchow suggested such a possibility,[2] but because of differences of opinion it was not generally accepted. On the other hand, Remak, Meckel, Waldeyer, and Thiersch opposed the idea of Virchow and believed that all cancer has its origin in epithelial tissue.[2]

However, in recent years, scattered reports in the literature indicate that others are again reverting to this original idea as a logical explanation for the origin of tumors. Observations by Choisser and Ramsey,[3, 4] Doerffel,[5] Tedeschi,[6] and McCarthy and Pack[7] imply that Kaposi's sarcoma is the result of a dysplasia of the reticulo-endothelial system. The association of this condition with other general systemic disturbances, such as lymphatic leukemia,[8, 9] myelocytic leukemia,[6] Hodgkin's disease,[7] mycosis fungoides,[10] and Brill-Symmers' disease,[7] suggests that all of these conditions are the result of a disturbance of the reticulo-endothelial system throughout the body. Tissue cultures of early Kaposi's disease substantiate this contention and suggest that the primitive mesenchymal tissue is the source of this disease.[11]

Since all tissues of the body are derived from this fundamental embryonic tissue by a process of differentiation, it is important to appreciate that histo-differentiation is based entirely upon chemo-differentiation. In other words, before a cell reaches the level of appearing to be different histologically from another cell, it must undergo specific chemical changes within itself which ultimately determine the histologic appearance of the cell. All of these preliminary chemical changes are, of course, invisible but most essential if there is to be any differentiation of tissue.

What is the factor or power that initiates and controls a certain set of chemical reactions which are destined to produce a specific type of cell? Thus far one can only imply that this is the result of embryonic potential power which resides in all mesenchymal cells.

In conclusion, I wish to suggest that the terms ectoderm, entoderm, and mesoderm be used only as descriptive terms, especially with regard to localization of body areas, and that these terms have no basis in fact when considering the body as a whole.

Since the egg and the sperm are mesodermal derivatives, it logically follows that the entire body is of a similar nature.

The so-called fundamental processes of fertilization, maturation, differentiation, organization, specialization, atrophy, metaplasia and neoplasia are not sufficiently understood.

Without a thorough knowledge of these processes we can speak only in general terms and refer to the unknown as the "potential power of the mesoderm."

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UNUSUAL DISEASES OF THE SPLEEN*

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SPLENIC CYSTS

CYSTS of the spleen present the rarest forms of cystic disease in abdominal organs. The first case of cystic tumor of the spleen was reported by Andreal in 1829. Since that time only 163 cases have been published in the medical literature, the last review being that of Harner and Chalmers.[26] The classification of splenic cysts is (1) primary cysts, which may be congenital, traumatic, inflammatory or parasitic, and (2) secondary, which may be due to trauma, degeneration or inflammation. Or they may be classified into (1) true cysts, that is, those lined by specific secreting membranes, including the epithelial dermoids and epidermoids; the endothelial lymphangiomas and hemangiomas; polycystic disease and some serous cysts; and the parasitic cysts lined by protoplasmic matrix containing numerous nuclei, mainly the hydatid cyst caused by the Echinococcus; and (2) false cysts with no specific secreting lining, including the hemorrhagic, the serous and the inflammatory types (due to acute necrosis, with infection or tuberculosis) and degenerative liquefaction of infarction areas caused by embolism or arterial thrombosis.

The majority of splenic cysts are found in the age group between 20 and 50 years and occur more frequently in women, especially during the childbearing period.

The history in such cases usually includes symptoms due to pressure on adjacent organs. Since the stomach and the splenic flexure of the colon are generally encroached on, nausea, epigastric distress, flatulence and constipation are common. Pain of varying degree is due to pressure against the abdominal wall and adhesions to neighboring structures. With cysts of the lower pole the splenic notch cannot be felt, but in those occupying the upper pole with downward progress of the spleen the anterior margin may be palpable.

The chief evidence is obtained by X-ray examination; the stomach may be displaced to the right and the splenic flexure of the colon pushed downward. Benton[27] states that downward displacement of the splenic flexure is almost pathognomonic of splenic cyst. The kidney may be pushed downward and the diaphragm may be high, with impaired motion.

Gastric bleeding with splenomegaly may be caused by obstruction to splenic veins, as in splenic vein thrombosis. In this condition blood is shunted through the vasa brevia of the stomach, varices may form in the gastric wall, and bleeding may occur. It might be postulated that pathologic conditions of the spleen with pressure on the stomach produce stasis and congestion and that the strain of vomiting is sufficient to initiate bleeding. Cysts of the spleen must be differentiated from other causes of splenomegaly and cystic disease of pancreas, mesentery, omentum, left lobe of liver, ovary and kidney. The only treatment is splenectomy.

PRIMARY TUBERCULOSIS OF THE SPLEEN

Winternitz[28] in a report of 50 cases of primary tuberculosis of the spleen states that great splenic enlargement is the outstanding physical sign. Spleens weighing from 1,000 to 3,000 grams are not unusual in this condition. The spleen in these cases is filled with a massive or conglomerate tuberculous caseation. This is quite a contrast to the small and incidental tuberculous splenitis encountered at autopsy in tuberculous patients. The term primary does not signify portal of entry or even the initial site of tuberculosis. In

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"primary" tuberculosis of the spleen it is almost certain that a primary extra-splenic involvement has long since healed and a latent splenic focus has gradually assumed clinical importance.

Primary tuberculosis of the spleen may clinically be the only discoverable tuberculous lesion. Often it is accompanied by tuberculosis elsewhere which, however, is nonpulmonary in at least 50 per cent of the cases. A miliary invasion of the liver via portal transport is usually a concomitant finding.

Engelbreth[29] brought the total number of recorded cases to 83. The condition is of considerable interest, beyond that of a mere rarity. There is evidence that splenectomy is markedly beneficial as regards the course of concurrent tuberculosis in other organs, and, also, tuberculous splenomegaly may be associated with various hematologic disorders, of which polycythemia is one, having been reported in some 13 instances. The latter association is beyond mere coincidence because of the rarity of the two conditions. As for which came first the evidence on the whole is in favor of the suggestion made by Remen (1921) that the spleen in polycythemia vera is a locus minoris resistentiae to tuberculous infection.

Tuberculous splenomegaly is usually associated with anemia and moderate leukopenia, the same hypersplenic mechanism being at work here as in other splenomegalies which affect the bone marrow.

Purpura is occasionally associated with pulmonary and nonpulmonary tuberculosis. The purpuric manifestations have been attributed to many causes: adrenal insufficiency, with consequent loss of vascular tone, toxic effect on the vascular endothelium, and cutaneous emboli in the course of tuberculous bacillemia. The role of the spleen in this type of purpura was previously unknown or ignored as in the report of Pratsicas,[30] in which splenic enlargement was noted in 4 patients with purpura accompanied by gastrointestinal hemorrhage. All 4 patients were found at autopsy to have tuberculosis of the spleen. This fact was not emphasized in this report, but the finding of miliary tuberculosis was thought to be the prime factor in the production of the purpura.

As regards the treatment of tuberculous splenomegaly the majority of recent writers recommend splenectomy as the method of choice. However, when it is associated with polycythemia the indication for operation is less clear-cut. Splenectomy in 2 cases proved to be fatal in both. In both there was a great increase in the red and white blood cell counts. The spleen if large evidently has a regulatory influence and when it is removed the polycythemia is heightened. Streptomycin therapy has been tried on 2 cases with some improvement. It seems to me, however, that since splenectomy may cause improvement of tuberculous lesions in other organs and, if the polycythemia recurs, modern treatment of this condition with radioactive phosphorus is totally adequate.

Calcified lesions of the spleen are associated in the majority of cases by age characteristics with primary tuberculous infection elsewhere in the body and perhaps represent the hematogenous phase of it.[31]

Other but rarer causes of calcified lesions in the spleen are trauma, infarcts (usually triangular in shape), and cysts of the spleen with calcification of the cyst wall.

SPLENOMEGALY AND RHEUMATIC HEART DISEASE

The presence of an enlarged spleen in a patient with rheumatic heart disease is considered to be almost diagnostic of subacute bacterial endocarditis by most clinicians.

Bennett and Durant,[32] in a series of 80 patients with rheumatic heart disease, found 18 to have splenic enlargement. In only 2 of these cases was the splenomegaly due to subacute bacterial endocarditis. These authors stated that the most common cause in their cases was long-standing congestive heart failure which had lasted from 2 to 10 years. This produced a so-called "cardiac" cirrhosis, proven at autopsy in 2 cases of failure of 9 years' duration. The autopsy showed gross and microscopic evidence of "cirrhosis" with interstitial and portal fibrosis in a degree compatible with long-standing "cardiac cirrhosis."

The term "cardiac cirrhosis" should really be "congestive cirrhosis." The term "congestive cirrhosis" is useful from a morphologic standpoint. Central fibrosis is confined to patients with congestive heart failure. In congestive cirrhosis the nodules of liver parenchyma are irregular in shape and show anastomosis, while those of Laennec's cirrhosis tend to be round, circumscribed and isolated. Koletzky and Barnebee[33] in an analysis of 30 cases of congestive cirrhosis found that, when compared to those cases (187) of passive hyperemia due to congestive heart failure, in the cirrhotic group there is a tendency to smaller livers, larger spleens and more frequent incidence of jaundice. A few large spleens, however, were found in both groups. The group of congestive cirrhosis with rheumatic heart disease comprised half of the total number of cases. Four of these patients had pure mitral stenosis. All the rheumatic fever cases with congestive cirrhosis had had bouts of decompensation with recovery, the number varying from 3 to 14.

Splenomegaly in congestive heart failure is questioned by many authors, although White mentions a pulsating spleen in cases of aortic and tricuspid insufficiency. Levine[34] wrote that a palpable spleen is rarely found in valvular disease of the heart "even when there is congestive failure." Kelsey and his group[35] thought that chronic heart failure of long standing failed to produce appreciable splenomegaly even though histologic changes were those of marked chronic passive congestion. These findings seem to indicate that chronic passive congestion per se is not a cause of marked splenomegaly. "Perhaps in order to cause splenomegaly the portal pressure must be higher than that produced by heart failure." Portal vein thrombosis may be a factor in some cases. Frequent and complete recovery from failure may be necessary to produce sufficient fibrosis; Willius[36] doubts that fibrosis can occur in the liver except in periods of recovery from decompensation. Toxic and infectious factors may be at work in cases of rheumatic fever; it is known that these cause hyperplasia of the splenic sinusoids and follicles. Certainly congestive cirrhosis does not explain splenomegaly in all cases, and Bennett and Durant were surprised to find that in 1 of their cases there were no symptoms or signs of congestive failure.

That there are other factors at work was brilliantly demonstrated by Cameron and deSaram[37] in the dissociation of the spleen from the portal circulation, thus eliminating the factor of portal congestion in the production of splenomegaly. By experimentally inducing toxic necrosis of the liver with carbon tetrachloride they were able to observe "pulp hyperplasia" in the marsupialized spleen in the rat, proving that these changes are independent of portal obstruction. They conclude that the splenic enlargement obtained "must be due either to the direct action of the hepatotoxic agent on the spleen or to some other agent produced by the damaged liver." Masses of large reticular cells blocked up the spaces of the venous sinuses. This theory sounds very attractive but has not been given much emphasis in the literature to date.

The following is a report of a patient with mitral stenosis and splenomegaly without apparent cause.

Case 5. Mrs. P. R., a 23-year-old white woman, was first seen at the Yater Clinic in September, 1946. She gave a history of repeated attacks of dyspnea on exertion followed by palpitation of the heart and the "spitting" of bright red blood on 5 occasions during the past year. Prior to the onset of the present illness she had been asymptomatic except for some dyspnea after some degree of exertion and a tight feeling in the throat on walking fast. There was no past history of rheumatic fever as such but she had had frequent sore throats as a child, often accompanied by fever.

Physical examination was essentially normal except for a rumbling Grade III apical diastolic murmur ending in a loud snapping first sound. Her plood pressure was 115/80. There was no evidence of cardiac failure. Fluoroscopy showed left auricular enlargement typical of mitral stenosis. The spleen was not palpable at this time. She was not seen again until December 8, 1949, because she had moved to California. In the interval there had been no signs of rheumatic activity by sign or symptom. Examination at this time revealed her weight to be the same. There still was no evidence of failure. The heart rhythm was normal. The spleen was felt 2 fingerbreadths beneath the left costal margin. The liver was also palpable. She had not had any fever. The sedimentation rate was normal. An electrocardiogram showed right ventricular preponderance. Her weight has varied from 102¼ to 106 pounds. The sedimentation test has been normal during these years. She has had 2 or 3 upper respiratory infections and prophylactic aureomycin and penicillin were given at this time. She has been carrying a full work schedule, and the splenomegaly has persisted in spite of lack of evidence of heart failure.

ABSCESS OF THE SPLEEN

Abscess of the spleen is not of frequent occurrence, but the diagnosis is not difficult when the condition is kept in mind. Of 3,600 autopsies reported by Billings[38] at the Pennsylvania Hospital, splenic abscess occurred in 0.7 per cent. Walker[39] reported an incidence of 0.4 per cent of autopsies at the Boston City Hospital. Three major modes of pathogenesis are now generally recognized: 1. Traumatic abscesses contribute 15 per cent of all splenic abscesses. Clinically they result from trauma to the organ, with a resultant perisplenic hematoma. 2. Abscess of the spleen occasionally results from extension of a neighboring pathologic process (as in the case reported below). Colonic or gastric neoplasms may invade the spleen, or left subphrenic collections may erode into it so that the organ forms the floor of the abscess cavity. 3. The greater percentage of splenic abscesses are metastatic by way of the blood stream. They follow local or general infection. Infection of the digestive tract is the main source, chiefly because of the high incidence of splenic abscesses following typhoid fever. However, there may be apparent spread by way of the splenic artery secondary to mastoiditis, furunculosis, otitis media, peritonsillar abscess, and thrombophlebitis. Abscesses have developed during the course of pneumonia, subacute bacterial endocarditis, appendicitis, puerperal infections, intestinal amebiasis, and anthrax.

Special mention should be made of the group of 5 cases reported by Rabin and Moolten.[40] Splenic abscesses developed in their cases as a result of metastases spread by way of the splenic artery from a lung abscess. In each case infection of a branch of the splenic vein occurred at the site of the abscess and eventually resulted in fatal pylephlebitis. Metastatic splenic abscess may develop clinical manifestations 1 day to several months after the appearance of the primary source. The onset may be acute with pain in the left upper quadrant or no signs of pain if the abscess is deep. If the upper pole is involved, pleuritic pain referred to the left shoulder (Kehr's sign) is present, and, if the lower pole is affected, peritoneal signs appear.

General symptoms of severe infection are usually present: spiking fever, chills, and leukocytosis. The fever is usually high and may reach 104°F. Splenic abscess should, therefore, be suspected in patients with pain in the left upper quadrant of the abdomen, especially if an adequate previous focus of infection is found or if there are any signs or symptoms of sepsis.

On physical examination there are usually marked tenderness and rigidity in the left upper quadrant, and there may be edema of the soft parts which overlie the spleen. The spleen is always enlarged and usually palpable, if tenderness and rigidity are not too great to impede proper abdominal palpation. Fluid may or may not be present in the left pleural cavity, and diaphragmatic mobility is restricted. X-ray examination of the colon may show downward displacement of the splenic flexure. Splenic aspiration may be tried but should be done in the operating room, and if pus is obtained the needle should be left in until the spleen is exposed to prevent empyema. Splenotomy is the operation of choice if the spleen cannot be easily mobilized because of adhesions. When there is accompanying phlebitis of the splenic vein ligation and splenectomy are preferred. The use of antibiotics, of course, offers new hope in the treatment of splenic abscess, particularly as adjuvant therapy.

Case 6. J. W., a 60-year-old white woman, became ill in March, 1946, with malaise, fatigue and afternoon fever. In September she had night sweats. The lone positive finding was an elevated sedimentation rate in November, 1946. The patient went to the Yater Clinic with the above complaints plus urinary frequency, urgency and nocturia, 1 time. On physical examination the spleen was palpably enlarged. Sedimentation rates remained high. There was a mild hypochromic anemia, *Endamoeba coli* and *histolytica* cysts were found in the stools. A sternal marrow examination showed complete hyperplasia of granulocytes and an increase in eosinophils. Complement fixation test for amebiasis was reported positive in June, 1948. In June the patient had an acute febrile episode in which her leukocyte count went to 34,000 with 847 polys. All other counts were normal. The patient was studied very extensively. Her spleen remained enlarged, and the liver was usually palpated 2 fingerbreadths below the costal margin. She complained from time to time of aching in her left flank. Her temperature was elevated persistently in the afternoon to between 99° to 100°F. At times, however, there would be a month when the temperature would remain normal. In April and June of 1948 she was hospitalized, apparently for pneumonitis. Her present and last admission, June 30 to the hospital resulted from a 10-day bout of dull pain in the center of her back and left sacroiliac region, radiating to the left buttock. The day before admission she had a chill followed by a fever of 104°F. Physical examination revealed her to be well nourished. Her spleen was enlarged and tender. Costovertebral angle tenderness was noted on the left. On July 17 a chest X-ray film showed evidence of fluid in the left costophrenic angle. X-ray examination of the gastrointestinal tract showed a gas-filled cavity in the left upper quadrant, extrinsic to the gastrointestinal tract. The stomach was displaced medially and the colon displaced inferiorly, and the left diaphragm was slightly limited in motion. There was some density at the left base in the chest film, whereas previously a hepatosplenogram had shown only a moderately enlarged spleen. Repeated X-ray films since June of this year had shown a persistent gas bubble in the left upper quadrant. Also, within the last 6 weeks a tender nodule had been noticed between the eleventh and twelfth ribs on the left. On August 2 the patient was explored for possible phrenic abscess. A discrete nodule 5 by 5 by 4 cm. was found in the left eleventh interspace, which was entirely separate and distinct from an underlying subphrenic and intrasplenic abscess, which was found to contain about 100 c.c. of very foul-smelling fluid and necrotic debris. By September 2 the drainage was fecal. On September 15 a splenectomy was performed with excision of the splenic flexure. A neoplasm involved the spleen, the splenic flexure of the colon and the abdominal wall. Between September 25 and October 12 a series of X-ray treatments was given to the area. The patient's temperature began spiking to 103°F. On October 13 the patient was going rapidly downhill. An X-ray film of the chest showed an enlarged heart and evidence of pleural fluid bilaterally. Oxygen and blood were given. Abdominal ascites developed and an X-ray film of the chest showed evidence of a large amount of fluid in the left chest and a density in the right middle third. The patient died on November 11, 1948.

At autopsy there was found a twelfth rib resection and a large fistulous tract in that area posterolaterally. There was 800 c.c. of straw-colored fluid in the left pleural cavity and 300 c.c. in the right. Dense adhesions bound the diaphragmatic surface of the left lung to the diaphragm. The lungs were congested and edematous. The right upper and middle lobes were grayish-red and firm. The left lower lobe appeared atelectatic. There were dense adhesions between the under surface of the liver, the bowel and the omentum. Above the liver, on the left, an abscessed area having a fecal odor was observed, communicating with the opening described in the region of the twelfth rib. The liver was enlarged 3 fingerbreadths below the right costal margin. There was an abscess in the region of the spleen containing some necrotic material. The tail and body of the pancreas appeared nodular and firm. The stomach was small and adherent to a tumor mass posteriorly. The kidneys were congested. The uterus contained fibroids, and a cystic ovary was present on the right. A large group of matted, retroperitoneal lymph nodes surrounded the aorta and vena cava. This mass extended to the left and up toward the abscess area. On cut section the tumor appeared firm and white and in some places necrotic. Microscopically the lungs showed congestion and thickening of the pleura. The liver showed an abscess in one area, and fatty infiltration and degeneration of liver cells. Dark brown pigment was scattered throughout. There was fibrosis of the pancreas. Sections of retroperitoneal lymph nodes showed reticulum-cell sarcoma cells replacing the parenchyma of the node. There was invasion of the adrenal and the fat surrounding the stomach wall.

This very unusual and interesting case is an example primarily of the difficulty in the diagnosis of splenic abscess which was secondary to invasion of the tumor from the splenic flexure of the bowel, even though no demonstrable connection was seen on X-ray examination with lipiodol injected into the abscess cavity. Perhaps splenic aspiration done earlier might have led to a positive diagnosis sooner, and certainly we must get over the idea that splenic aspiration is a serious operation.

TUMORS OF THE SPLEEN

Metastatic Tumors. Special emphasis has been placed on the spleen in regard to its infrequency as the site of carcinomatous metastases. Lymphatic vessels do not penetrate the splenic pulp and are not abundant even in the capsule. Lymphatic metastasis to the spleen is unlikely. Metastasis, therefore, must be by way of the circulation. The splenic artery is remarkable for its large size in proportion to the organ it supplies. Therefore, one would think that tumor metastasis would be frequent, as suggested by the frequency with which thrombotic emboli and infarct are found in the spleen. The continuous circulation and the fact that the spleen, because of its irregular contractions, is considered a mobile organ may explain the infrequency of metastasis, since these contractions might be quite effective in preventing the lodgement of tumor cells. Warren[41] believes that this explanation is more tenable than the idea that splenic tissue possesses any antineoplastic properties. The suggested role of the reticulo-endothelial cells in preventing splenic metastasis is controverted by the great frequency of secondary nodules in other parts of the so-called reticulo-endothelial system, namely, the liver, lymph nodes and bone marrow.

Warren, in 1,140 autopsies on carcinoma patients, found metastatic carcinoma in the spleen in 46, or 4 per cent, of the cases, as compared to 52 cases, or 4.6 per cent, metastasizing to one or both kidneys. Some of these metastases were microscopic and probably indicated a generalized terminal spread by way of the blood stream. Splenic metastasis was recognized grossly in only half of the cases. The most frequent tumor which metastasizes to the spleen is breast cancer. Of 193 carcinomata arising in the breast, 28, or 15 per cent, metastasized to the spleen.

Although splenic metastasis is of no clinical importance, nevertheless, the accurate determination of its frequency has important bearing on the question of the immunity of the spleen to malignant disease.

Primary Malignant Tumors. These are infrequent. In 4,000 operations at the Boston City Hospital splenectomy was twice resorted to for primary malignant tumor. A total of about 200, of which a fourth were lymphosarcomas, have been reported in the literature to date.

Smith and Rusk[42] reviewed the subject thoroughly and gave the most functional classification by virtue of its simplicity. They based their classification on the 3 types of tissue which can give rise to neoplasm.

1. Tumors arising from the splenic capsule and trabeculae:
   (a) fibroma; (b) fibrosarcoma; (c) spindle cell sarcoma
2. Tumors arising from the splenic lymphoid elements:
   (a) lymphoma
   (b) lymphoblastoma:
      (1) lymphosarcoma
         a. Large round cell (reticulum-cell type)
         b. Small round cell (lymphoblastic type)
         c. Giant lymph follicle hyperplasia
   (c) Hodgkin's granuloma
3. Tumors arising from the endothelium of splenic sinuses:
   (a) angioma; (b) endothelioma; (c) endothelial sarcoma; (d) angiosarcoma
4. Tumors arising from the cells of the reticulo-endothelial system:
   (a) Gaucher's disease; (b) Niemann-Pick splenomegalia; (c) Christian syndrome; (d) reticulo-endothelioma; (e) reticulo-endothelial sarcoma
5. Carcinoma

The diagnosis of splenic tumors can be difficult and delayed long enough to make the prognosis hopeless. This is indicated by the fact that only

58 out of 150 cases reported were splenectomized.

The following symptoms, however, are highly suggestive of a diagnosis of primary malignant neoplasm of the spleen:

1. Enlargement of the spleen, with or without irregular nodulation, in the absence of a characteristic blood picture.
2. Persistent or intermittent pain in the left upper quadrant, with or without radiation.
3. Tenderness on pressure over the spleen.
4. Intermittent, irregular fever, particularly in the cases of lymphosarcoma.

All these criteria obtain in the case here reported, but the diagnosis was not made until necrosis and abscess formation developed.

Tumors arising from the endothelial lining of the splenic sinuses are next to the lymphoblastomas in frequency. Lazarus and Marks,[43] in a review of the literature, cite 37 cases that were characterized by rapid growth, cachexia and early metastasis to liver, lungs, regional lymph nodes and pancreas. Operation is usually too late for cure.

Benign Tumors. Benign cavernous hemangioma of the spleen is rare. There are 31 cases reported in the literature reviewed by Hodge and Wilson.[44] Many of the reported cases have been asymptomatic and were incidental autopsy findings. Other cases were surgical and presented a mass in the upper abdomen causing symptoms of pain or evidence of rupture (spontaneous or traumatic) with severe internal hemorrhage.

Some of these tumors may attain an enormous size and undergo cyst formation. Splenic hemangioma should be suspected in patients with splenomegaly unrelated to a general disease process. When rupture (spontaneous or traumatic) occurs, shock, pain, and signs of generalized peritoneal irritation are usually present. Shock must be combated, and immediate operation is imperative. Thorough microscopic examination of many of the traumatic cysts of the spleen might disclose an underlying hemangiomatous lesion, and unless this is kept in mind, cases may be missed.

SPLENIC BIOPSY

A thesis on the spleen would not be complete without seriously considering the new clinically accepted procedure of splenic aspiration. It was rather slow in gaining acceptance in this country due to the fact that we did not know that it could be done with so little trouble and that the etiology of splenomegaly was usually thought to be diagnosed without it. In Europe splenic aspiration was practiced in the 19th century, first by Widal. I have heard Napier say that he had done at least 10,000 without a single fatality. Most of his cases were done for the diagnosis of visceral leishmaniasis (kala-azar). He uses the transabdominal approach and is so deft at the procedure that only 5 seconds is required. By first using a drop of phenol on the skin, which acts as a disinfectant and also a counterirritant, he rapidly introduces a 22-gauge needle without an obturator in the mid-clavicular line below the costal margin. The patient is then told to stop breathing and the needle is rapidly introduced, aspiration accomplished, and both needle and syringe are promptly withdrawn. A drop of the material is usually obtained, placed on a clean slide, smeared, and stained with Wright's or Giemsa's stain.

Block and Jacobson[45] had 2 fatalities in a series of 92 cases. However, they used the transthoracic approach, which is wrought with a great deal more danger due to the line of approach, which is through the pleural cavity, diaphragm and peritoneal cavity, and the use of the Vinn-Silverman needle, most commonly used for liver biopsy.

The main use of splenic aspiration should be reserved for the diagnosis of those cases in which bone marrow and peripheral blood examinations and thorough clinical investigation still leave doubt as to the diagnosis of splenomegaly. Unquestionably, in the past, before this procedure achieved its present vogue, many cases of so-called "unexplained" splenomegaly would now be explainable. They could have been Gaucher's disease, limited to the spleen, Hodgkin's disease, limited to the spleen, or lymphosarcoma of the spleen.

Extramedullary hematopoiesis, such as obtains in spent polycythemia, and osteosclerotic anemias can be diagnosed by splenic aspiration.

Criteria for the diagnosis of splenic aspiration have been enumerated by Morrison et al[46] in their excellent article based on the study of 105 cases. They found it of most value in the diagnosis of Hodgkin's disease (in which the presence of the Reed-Sternberg cell is diagnostic) limited to the spleen, lymphosarcoma, giant lymph-follicular hyperplasia, and agnogenic myeloid metaplasia, in which there are extramedullary hematopoiesis, immature erythrogenetic elements, immature myeloid elements and megakaryocytes. Agnogenic myeloid metaplasia is a compensatory phenomenon in response to a failing marrow, and splenectomy is definitely contraindicated. The causes are osteosclerosis, myelosclerosis, and myelophthisis. The presence of hematopoiesis in the spleen is also proof against the diagnosis of hemolytic anemia.

The use of the Vinn-Silverman needle has the advantage of getting more tissue and there is more chance to obtain granulomatous lesions, as proved to be true in the case which is reported later.

The primary complication of splenic aspiration biopsy is hemorrhage, usually of the delayed type. That is why patients should be required to stay in bed for at least 24 hours. During the first 2 hours sandbags should be applied to the left side to limit motion and prevent movement. The blood pressure should be taken frequently, and the onset of acute pain in the left upper quadrant or shoulder should set the wheels going for emergency transfusion. The patient should be typed and cross-matched as a precautionary measure. Check for any bleeding tendency should be made, and, if present, splenic aspiration is contraindicated. Lethargic and poorly responsive individuals should be excluded because coöperation is needed for splenic aspiration. Block and Jacobson believe that examination of splenic tissue is one of the most successful means of differentiating between atypical leukemia or cryptic types of leukemia and the various types of hypersplenism, especially splenic neutropenia and the fat storage diseases. Similarly, a decision concerning the indications and contraindications for splenectomy, which is usually a difficult problem, may be reached more accurately. This is especially true in Banti's disease and thrombosis of the spleen, in which liver biopsy is also indicated. Patients who are likely to be benefited by splenectomy have little, if any, extramedullary hematopoiesis, whereas patients with other types of splenomegaly, particularly those due to leukemia and myeloid metaplasia, not only are poor surgical risks, but may do worse after splenectomy. The major exception to this rule is the combination of leukemia and secondary hemolytic anemia, in which splenectomy may be the only method of combating anemia.

In patients with aleukemic blood and in whom aspiration of marrow has failed to yield a diagnostic smear splenic puncture will frequently reveal a lymphoma or leukemia.

Examination of splenic tissue has been most useful to Forconi and Weil[47] in the recognition of leukemoid reactions and pseudoleukemias. Eight cases of myeloid metaplasia have been discovered in a group of patients referred with the diagnosis of leukemia.

Splenic biopsy may be a useful tool in the diagnosis of infectious granulomas accompanied by splenomegaly. Many caseating and noncaseating granulomas are nonspecific in nature, and unless a specific etiologic agent is demonstrable no diagnosis can be made. However, if the whole clinical picture is considered, an etiologic diagnosis may at best be surmised, as in the following case.

Case 7. G. H., a colored woman 23 years of age, was admitted to my medical service at Georgetown University Hospital on March 1, 1952. She was transferred from Columbia Hospital (Ob-Gyn) for investigation of an anemia which had been associated with each of 4 pregnancies, and which required pre- and postpartum transfusions. Her chief complaint at this time was frontal headaches after meals since the birth of her last child, February 15, 1952. She had received 3 transfusions while at Columbia Hospital, the first one a day prepartum. Her hemoglobin at that time was 57 per cent with a hematocrit of 26. She received 2 more transfusions postpartum, each of 500 c.c. of blood. The headaches had been persistent since delivery and were probably unrelated to the anemia or the transfusions.

She gave a lifelong history of epistaxis with diminishing frequency in the last few years to about 1 every month. They were easily stopped by cold compresses. She denied any other bleeding tendencies or easy bruising. There had been no joint pain or swelling, leg ulcers, abdominal pains or excessive menses. There was no history of ingestion of any toxic substances. She had had 4 normal deliveries in the last 5 years and all carried to term. She had had a postpartum hemorrhage after the first and received 500 c.c. of blood. She received transfusions of whole blood with each succeeding pregnancy, although there was no evidence from delivery notes that she had had any excessive postpartum loss of blood. During the last pregnancy she was told when first seen at the prenatal clinic in November, 1951 that she was anemic, and iron therapy was started by mouth. The anemia persisted, and 400 mg. of iron was given intravenously in December of 1951 without much improvement in the blood count.

Physical examination revealed a well developed, well nourished colored woman. The temperature was 98.6°F., the blood pressure was 110/78. The abdomen was distended, the liver edge was palpable 4 cm. below the right costal margin; and the spleen was felt 7 cm. below the left costal margin. There was no adenopathy or uveitis.

A complete blood work-up was done with normal results. The hematocrit was 37. The red blood cells numbered 4,500,000, the platelets 164,000, the reticulocytes 2.2 to 3.1 per cent, and the white blood cells 3,250, with a normal differential. MCV was 82, MCH 27, and MCHC 32. Clot retraction was 52 per cent in 1 hour, and red cell fragility was normal. The bleeding time was 2½ minutes. The clotting time was 5 minutes (Lee and White). The prothrombin time was 14 seconds (100 per cent). A prothrombin consumption control was 25 seconds, and the patient 26 seconds. Plasma recalcification control was 195 seconds, patient 180 seconds. Coomb's test was negative. Rumple-Leed test showed 4 to 5 petechiae. There was 6 per cent retention of bromsulfalein in 45 minutes. Total serum protein was 7.0 Gm., with albumin 3.3 and globulin 3.7. Alkaline phosphatase was 11.8. Heterophile agglutination was positive in a titre of 1:14. Thymol turbidity was 6.8 units, and cephalic flocculation was 1 plus in 48 hours. Blood cholesterol was 245 mg. per cent, and cholesterol esters was 223 mg. per cent. Urinalysis was normal.

The sternal bone marrow was hypercellular marrow, with a moderate increase in the erythrocyte series, particularly rubrocytes and metarubrocytes. Eosinophils were prominent, and megakaryocytes were numerous and producing platelets.

X-ray films of the chest showed old fibrotic lesions in the right apex. Several calcified lesions in the perihilar area were seen bilaterally. The B.P.O. no. 1 and no. 2 for tuberculin sensitivity was negative on 2 occasions. An upper gastrointestinal X-ray examination failed to reveal the presence of esophageal varices, ulcer or hiatal hernia.

In view of the lack of explanation for the anemia it was decided to make hepatic and splenic biopsies to see if any lead could be obtained from these procedures. Liver biopsy showed several small areas of necrosis, which were situated in the central portion of the lobule. There were 2 well-formed granulomatous areas, in which there was evidence of liver necrosis and round-cell infiltration, an epithelioid-like cell reaction and formation of giant cells.

Splenic biopsy was done by the transabdominal approach, with the Silverman needle, in an attempt to find areas of granuloma in the spleen also. We were happily rewarded, for the splenic tissue showed several small granulomatous lesions which were composed practically entirely of proliferating reticulo-endothelial cells. These were surrounded by collars of round cells. These lesions were quite similar to those seen in the previous biopsy of the liver. The lesion was said to be compatible with sarcoidosis.

This case illustrates the value of splenic biopsy when all other means of hematologic investigation have failed. This patient probably has sarcoidosis of the liver and spleen. The enlarged spleen is probably exerting a hypersplenic effect on the bone marrow, producing the anemia, which is much more marked and aggravated by the tax on the marrow of each succeeding pregnancy. This patient will be followed in the hematology clinic, with the recommendation that splenectomy be done if anemia again develops.

CONCLUSION

The renewed interest in the spleen was brought about by the new concept of its possible endocrine function. This has resulted in widespread research in an effort to isolate substances which may be responsible for the clinical picture of hypersplenism. Hyposplenism has become a new entity awaiting further evaluation. The now accepted technic of splenic aspiration has brought forth a new weapon in the differentiation of the splenomegalies.

I hope that this thesis will make interested clinicians aware of some of the important and unusual conditions of the spleen. Although these conditions are not common, with the means now available they may be diagnosed antemortem. The day will soon come when the spleen will no longer be the organ of mystery.

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HERPES ZOSTER AND VARICELLA OCCURRING SIMULTANEOUSLY IN THE SAME CASE

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THERE have been only a few cases reported in the American literature of varicella and herpes zoster occurring simultaneously in the same person,[1-6] but numerous reports have come from England, Europe and elsewhere for many years. Still, it is of relatively rare occurrence when one considers the commonness of both shingles and chickenpox. More numerous are reports of herpes zoster following varicella, and vice versa, and cross reactions on exposure to one or the other. Immunologic relationship has been demonstrated by inoculation of children with fluid from vesicles of herpes producing a varicelliform generalized rash, and vice versa. Cross agglutination studies have been made. The virus of herpes has been grown, and that of chickenpox has not.

In August, 1951 I cared for a man who had typical herpes zoster and who within 3 days developed typical varicella. The following is a report of this case.

Report of Case

Mr. P. S., a 40-year-old white bachelor, consulted me on August 3, at which time he complained of a rash on the right forehead. Prior to the development of this rash he had some pain in the forehead, over the right ear, and in the scalp. The lymph nodes behind the right ear had been enlarged and tender; however, the pain had subsided somewhat as the rash developed. Inspection revealed a vesicular eruption. The vesicles were tiny, of equal size, and at the same stage of development. They contained clear fluid and occupied the right side of the forehead only. He was told that he had herpes zoster and was given an analgesic and sent home to bed. He had been advised also that the rash might spread, and that if it did, or if it began to involve his eye, he should be seen at once.

Seventy-two hours later he was again seen and found to have an extensive chemosis of the right eye. There were a number of larger vesicles over the right cheek and right upper lip and several smaller vesicles on the left cheek. At that time he had a temperature of 102°F. He was admitted to the Alexandria Hospital, where when he was undressed, numerous vesicles in different stages of development were found over forehead and trunk (figures 1 and 2). A white blood cell count on admission was 2,000, with 70 per cent lymphocytes. An ophthalmologist was called to see him, and he was given boric acid soaks for the eye. No vesicles were present on the conjunctivae or the sclerae. The day after admission, when the accompanying photographs were taken, defervescence had occurred. Unfortunately, no opportunity was found to study the fluid or cellular contents

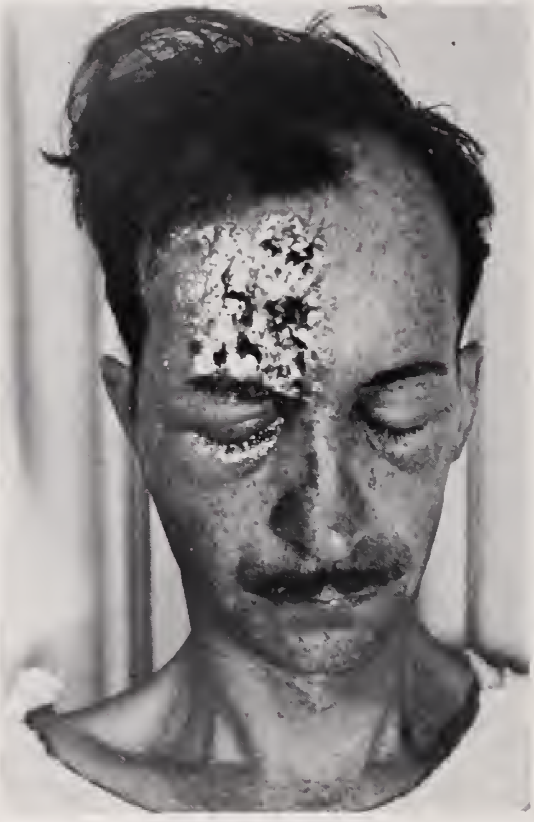

FIG. 1. The multiple vesicles have coalesced, with lesion partially hidden by a covering of medication. The unilateral distribution is clear.

of the vesicles for inclusion bodies. Following that he got well within the next 10 days, but there was still a heavy eschar of the right forehead. The day after admission blood was drawn for virus exclusion studies. Repeated specimens were drawn 10 and 24 days after the first specimen. During his convalescence he developed an iritis, which was treated with cortisone ophthalmic ointment with excellent results. The lesions on the forehead from the herpes zoster caused a deep eschar with considerable destruction of skin. Healing was slow, leaving an extensive, moderately disfiguring scar. However, complete healing had taken place 3 weeks following the onset of the herpes.

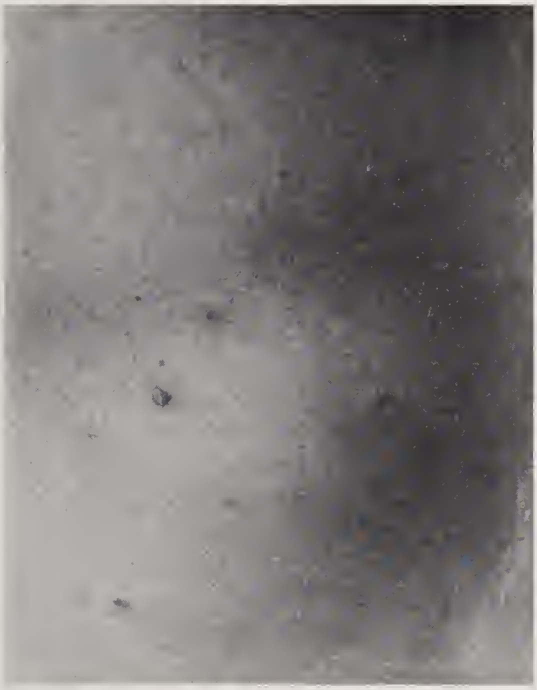

FIG. 2. Lesions of chickenpox on upper abdomen at the same time as in figure 1.

The virus studies were conducted by the Department of Virus and Rickettsial Diseases of the Army Medical Service Graduate School, Washington, D. C. by Dr. Ross L. Gauld. The report was as follows:

> Specimens are negative for complement-fixing antibodies of Rocky Mountain spotted fever—rickettsial pox group. Neutralizing test for herpes simplex was positive and regarded as of no significance, since the antibodies were already present in the fifth day of illness. Other virus identification studies were not possible.

One naturally speculates as to whether both clinical entities in this case were caused by the same virus, or whether the herpes could have enhanced a latent chickenpox infection and itself been intensified by secondary infection. The destruction of skin on the forehead was more than is usual in herpes zoster, and the pain was less. There was no involvement of the conjunctivae or sclerae with vesicles. It is unfortunate an examination for inclusion bodies of fluid and cellular material from the vesicles of the forehead and body was not made.

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JOHAN GEORG MEZGER AND THE HEALING TOUCH

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ONE of the most ancient methods used in the treatment of disease by purely physical means is massage. There was a time when the art of massage flourished and had a great many devotees. Its greatest advocate was Johan Georg Mezger, the first physician to develop massage as a curative agent and to introduce it as a healing procedure.

Mezger was born in Amsterdam in 1838. From early youth he was interested in all physical movements which in any way helped to develop the body or relieve it of its ills. He became particularly interested in gymnastics, in which art he became an instructor. In the course of his teaching duties in his native city he began to experiment with massage as a curative measure in certain external diseases and devoted himself to experimenting with various types of strokes and rubs, becoming in time well known as a masseur. Mezger decided, however, that he would be able to serve with greater effectiveness if he were to become a physician. He entered the medical school of the University of Leyden, therefore, and on September 15, 1868, received his degree in medicine.

After graduation, young Dr. Mezger went to Bonn and entered the clinics to supplement his education. He practiced massage and at the same time taught other doctors the fundamentals of this important branch of the healing art, attaining a reputation as a very able exponent of massage in the treatment of disease.

As a result of the Franco-Prussian War Dr. Mezger left Bonn and settled in Amsterdam as a specialist in massage. A short time later he faced the sharp antagonism of his colleagues, who accused him of violating the code of ethics in keeping his method a secret in order to assure himself of large pecuniary gain. This was not true. He was always giving lectures on scientific massage. In addition, he selected assistants whom he carefully trained in his methods. These assistants were required to be physicians and had to remain with him for 3 months, during which time they received full instructions in all the branches of massage.

Dr. Mezger was very anxious to have physicians recognize massage as a legitimate branch of medicine. This goal was quickly reached in Sweden as the King of Sweden was a great believer in massage. The latter sent 2 young physicians, Berghman and Helleday, to study with Mezger. When they returned to Sweden they were instrumental in establishing massage as a very essential and important branch of medicine; it has remained so ever since.

Dr. Mezger was convinced that grave nervous disturbances could be successfully treated with massage, and he was soon able to prove that this was the case. A young lady in 1876 came to Amsterdam from the Dutch colonies to seek Mezger's help. In her childhood she had had a bad fall which resulted in lameness. No medical treatment could restore the use of her limbs. She was so very beautiful, however, that a Dutch officer fell in love with her and married her in spite of her crippled condition. This was so grave that on the day of her marriage she was unable to leave her bed and the minister had to perform the ceremony in her room. Mezger immediately began to treat her. After a few weeks she was able to walk about without difficulty, impatiently awaiting the moment when she would be able to run to meet her husband who was returning from the battle against Atchin.

Mezger's practice grew in size and importance from year to year. Since it was no longer possible for him to accommodate all of his patients in his small house, Mezger moved to the Amstelhof, the best hotel in Amsterdam. There he had some of the leading men and women of the day as patients. A cartoon in 1884 shows Bismarck standing before Mezger, while in the background several princesses are awaiting his attention. Bismarck says: "I believed I had power in my hands, but I can see that you have Europe's rulers under your thumb."

Because of difficulties with the city government Dr. Mezger decided to leave Amsterdam for The Hague. The city administration of Amsterdam had placed a large gas pipe under Mezger's house. Mezger objected, considering it dangerous and fearing an explosion. Preparations for his removal to The Hague were practically completed and his office hours at the Hotel des Indes had been announced when the matter was finally settled to Mezger's satisfaction.

Then came the critical year of 1887. In that year he built the villa Irma in Bad Domburg near Amsterdam where he had at first spent his vacation and later transferred his summer activities. For that reason the Amsterdam public found it difficult to understand the rumor which began to circulate at the end of July of that year, that it was Mezger's intention to leave Amsterdam and take a post as the director of a large sanitarium in Wiesbaden.

Mezger's decision gave rise to general excitement, especially when people heard that he was on his way to Wiesbaden to complete negotiations. On his way back Mezger stopped to visit the Princess of Wied at Monrepos near Neuwied who requested him to remain in Amsterdam. It was undoubtedly due to her persuasion that Mezger decided to remain. The joy over Mezger's decision was boundless in Amsterdam.

It was soon learned, however, that Mezger's decision had not been final. A year later the building commission of Wiesbaden resumed negotiations, and Mezger decided to go there. The reason for his change of mind, he said, was that his aristocratic patients who flocked to Amsterdam from all parts of the world were exposed to the insults of the street hoodlums of the city, and that the administration, in spite of his repeated complaints, refused to do anything about it. His lifelong assistant, Dr. La Cave, accompanied Mezger to Wiesbaden. Mezger reached Wiesbaden on December 23, 1888 and immediately began to practice at the Rheinhotel. As usual, he enjoyed great success.

Everything seemed to progress most satisfactorily when one day, entirely unexpectedly, Mezger told the board members of the Wiesbadener Bade establishment that he wished to withdraw from his agreement because a coachman employed by the company had refused to drive him to Lagensschwalbach. Although immediate steps were taken to give him satisfaction, Mezger persisted in his demand to be released from his contract. The organization was greatly embarrassed, because without Mezger the entire undertaking would immediately collapse. Without delay they attached Mezger's property in the amount of the estimated damage, 1,500,000 marks. In order to protect himself Mezger became a naturalized German. The company then endeavored to reach a compromise settlement. Partly because of his great disappointment in overestimating the company's financial position, and partly because of his cunning in divesting his contract of any binding agreement, Mezger again brought the matter into court, and in January, 1890 he completely broke with the organization, establishing himself independently at the Rheinhotel.

In January, 1892 the Emperor of Russia sent an officer of his personal staff to Mezger and accompanied Mezger to St. Petersburg in a royal coach to treat the Empress. He lived in the Winter Palace and received 1,400 marks a day. The treatment lasted for 4 weeks, and Mezger returned to Wiesbaden with gifts of diamonds, decorated with the order of St. Stanislaus. He was unable to stay here any longer, however. During his absence a new proprietor took possession of the Rheinhotel, and he and Mezger could not get along. Mezger demanded 20,000 gulden merely as salary for his assistant. Mezger either would not or could not have his patients stay at the hotel during treatment, and so in the eyes of the owner business was bad. He gave Mezger notice, and Amsterdam began to hope that he would return to that city.

Mezger considered going to Rome, but France proved more attractive. On July 6, 1892 he received his dismissal from the Preussicher Untertanenverband and moved to Paris on December 31, 1892, resuming his activity in January, 1893 at the Hotel Meyerbeer; again he attained his usual great success.

From this time on Dr. Mezger began to divide his activities: during the winter he practiced in Paris, and during the summer at his villa in Domburg. He soon began to play an important role in Domburg. He was the benefactor of the spa, which was filled with the rich and aristocratic. In his spare time Mezger etched landscapes on shells, of which he soon had quite a collection. He lived quietly, peacefully, and full of contentment until 1900, when he again got into difficulties. He had invented a massage machine which he began to exploit without too much restraint. That Mezger should have permitted a layman to underwrite his machine was enough to cause lively comment, but in addition he issued a booklet which described his apparatus in such terms that even the most easy-going doctors were aroused.

This pamphlet carried a description of a rather formidable hammer with which the patient was to strike his abdomen repeatedly in order to obviate the formation of gases or to expel existing gases from the body. In this manner a number of diseases, a list of which was given, could be prevented. This was obviously quackery of the worst sort.

The booklet was bitterly denounced and the denunciation grew in volume when a new edition appeared with even more radical ideas. One of these was the recommendation that the hammer be fastened in a rigid position while the patient was to run repeatedly against it with his abdomen, instead of the reverse, striking the abdomen with the hammer.

In the midst of all this Mezger wrote not a line regarding this matter. He saw that he had made a mistake and decided that silence was the best course to follow in the matter. In time Mezger's hammer was forgotten. However, among the relics preserved by Bad Domburg you may still see this hammer.

Life for Mezger was always interesting. In 1908, with the support of the citizens of Domburg, he fought a Dr. Broecke of Middleburg, whose plan it was to establish a children's sea hospital in Domburg, where, in addition to others, tuberculous children were also to be admitted. Mezger feared that this would jeopardize his practice. In the same year, Bad Domburg celebrated Mezger's seventieth birthday as well as his 40 years of residence in Domburg with due pomp.

In 1909 a rumor began to be heard that Mezger was suffering from a grave disease which required 2 operations and that apparently his case was hopeless. He recovered slightly, but on March 3, 1909, in Paris, he died. His body was transferred to Middleburg in his native land, and on March 6 he was buried in Oostkapelle in a plot he had purchased.

In the following year a monument, executed by Sockel, was erected to Mezger by the grateful Bad Domburg. It was unveiled on September 29, 1910. It is a monument to a physician who, although he had some unorthodox ideas and was quite difficult to get along with, nevertheless was the first to establish the art of massage on a scientific basis.

Dr. Mezger was the first to lay down the scientific principles of massage. He found that massage brought about certain well-defined bodily changes:

1. It stimulated muscles, nerves and gland cells.
2. It soothed the nerves.
3. It acted on the lymph and blood supply, increasing the number of red blood cells.
4. It aided the absorption of fluids and broke down adhesions.
5. It increased the flow of blood and lymph and stimulated the entire body.
6. It increased the activity of the skin, such as the secretion of wastes, and increased its nutrition.
7. It helped in the removal of waste products and thereby reduced fatigue.

Mezger established massage as of definite healing value in quite a variety of conditions. In rheumatism, massage promotes the absorption of waste products, and long passive movements promote mobility. The blood and lymph channels are opened up, the normal flow of blood and lymph is reëstablished, and healing is encouraged.

Among other things Mezger found that the pain of neuritis can frequently be removed by stroking along the course of the affected nerves or by massage over the site of the origin of the pain. Neurasthenia and insomnia are greatly benefited by gentle stroking.

Dr. Mezger popularized 3 main varieties of massage: stroking massage, compression massage, and percussion massage. Stroking massage consists in passing the hand over an extended area of the body. Compression massage consists of kneading, friction and pétrissage, all of which closely resemble one another and are used to exert local pressure. The effects extend deep into the structure, such as the muscles and blood vessels. Percussion massage consists of administering a series of blows to the part. This is the most vigorous form of massage, and the results are very invigorating and immediate.

The teachings of Johan Mezger are still followed. His mark on medical treatment is permanent, for he was the doctor to establish 'the healing touch' on a firm foundation.

President's Page

ATTENDANCE AT MEDICAL MEETINGS

Attendance at local medical meetings has fallen off in recent years. This has been a matter of concern to your officers and program committee. I can remember when our Society had a weekly scientific meeting that was regularly well attended. Nowadays with fewer meetings one often finds but a corporal's guard in the auditorium, even when distinguished visiting physicians are on the program.

What are the reasons and what is the remedy? Among reasons given is the tremendous number of meetings of small societies and hospital staff conferences. I doubt that doctors are any less keen to keep abreast of medical progress. They apparently are more interested in smaller gatherings with their close acquaintances. And too, our doctors subscribe to some of our excellent medical journals which they can read at leisure in their dens. Perhaps some men stay home to see the fights and skits on television. The doctor is like the tired business man—he needs rest and relaxation. And yet there is no profession which requires such constant study to remain in the front ranks. This is one of the reasons why so many men take up a specialty—it is easier to keep up with new developments in a limited field.

A remedy is hard to find. If the above reasons are valid, it is apparent that our program committee must compete with some attractive conflicting interests. The committee must arrange programs that are "knockouts." It must remember that doctors want information of practical value. I believe that well moderated panel discussions of a single, live topic are more popular than individual papers. Have you ever gone home from a meeting with the feeling, "that was an evening wasted"? We must prevent that.

We have practically eliminated all scientific meetings arranged by the Society and are concentrating on the annual and mid-winter sessions, but we are urging greater use of our building for meetings of other societies and are willing to be co-sponsor of these. We earnestly hope to get our Washington doctors to consider our building the center of medicine in this area. What more fitting place than the one structure that belongs to all the doctors? If you are not satisfied with our meetings, let us know. We want suggestions for their betterment.

Wallace M. Yater

Editorials

THE CHANGING PATTERN OF MEDICAL LEGISLATION

The District of Columbia Medical Society has a particular distinction. More than any other physicians, its members are in a position to observe, day by day, what is happening in the field of Federal medical legislation. Furthermore, among your patients are Congressmen, Ambassadors, high-ranking executives, and visiting dignitaries. One of your responsibilities is to keep the bureaucrats in good health. It is obvious that you are both alert and critical. You are yourselves a part of the legislative picture. Your Society certainly was prominent in that picture in the late thirties and early forties before there was a Washington Office of the American Medical Association. During those years it was largely you who stood off the forces which even then were intent on drastically changing the character of medical practice. In your private and public contacts with Senators, Representatives, Federal officials and the judicial branch of Government you ardently and faithfully represented the medical profession. It is noted that you carry a few honored scars from one of those skirmishes, but I want you to know that doctors all over the country are proud of how you fought for the profession in those years.

The attack on our profession at that time was a frontal assault, an out-and-out advocacy of socialized medicine. There was not much camouflage or deceit involved. We knew whom we were fighting, because those who didn't have their names on the bills at least supported them loudly and openly. We usually knew just what the bills proposed to do because that was set down in black and white in the language of the bills.

All of you know that today the stakes are the same—who will control the practice of medicine? But those of us who are close to this problem see some changing methods. It is one of our responsibilities to know as much as we can about what the social planners are attempting. Instead of one big issue to fight we now have a hundred. With your help we checked the tide of medical socialism once. Now it is attempting to flow back in again, patiently seeking out every little channel. Some of this legislation appears to be worthy, and it is worthy. But much of it is dangerous, not to the medical profession alone, but to the American public as well.

One of the great difficulties now is that all fringe bills designed to restrict medical practice are clothed in the white robes of virtue. If we oppose them, or even have the temerity to question them, we run the risk of being branded the robbers of orphans, widows and old people; we aren't expected to raise our voice about any medical phases, because in the end (theoretically at least) some deserving person will benefit from the legislation. Also, there is just enough good in many of these bills to interest the unwary and to blind them against the preponderance of evil and ultimate harm.

During the closing weeks of the last Congress a bill was proposed to extend social security benefits. About four million people would benefit. They were old people and dependents who doubtless needed more assistance in an era of inflation. But tucked away in the bill, in fine print as it were, was an amendment to which American medicine had to raise an objection. It would critically restrict the private practice of medicine by giving the Social Security Administrator unprecedented power to prescribe and define certain medical treatments. Of course, the American Medical Association was criticized up and down

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

and across the country for taking food out of the mouths of the poor. Fortunately, a few of the lawmakers listened to the medical profession and reasoned out the issues. The amendment in question was modified, and as another safeguard, public hearings will be held before it becomes operative. No effort at all was made to hold public hearings last spring. We must assume that then the administration thought the bill would go through as written by the Committee, with the assistance of Federal Security Agency officials.

Another good example of the inflow of medical socialism was the new prescription drug act, passed during the 82nd Congress. The medical profession had no argument with the main objective. It was to legalize telephone prescriptions and in general to bring up-to-date the prescription code, which had become a jumble of regulations and official interpretations. But here also some of the people in the administration thought they had discovered a new channel to give them control over medical matters. As originally written, the bill would have given the Federal Security Administrator authority to go down the lists of thousands and thousands of drugs, many in use for a century, and decide which should be restricted to prescription-only use. But there were lawmakers with enough intuition to detect and eliminate this section after warning signals had been sent up by physicians, the pharmaceutical industry, and retail druggists.

The examples so far cited have been legislation originating in our own Congress—in my opinion, the proper place for legislation to originate. There, as we have demonstrated, we are able to promote the good and to stop most of the undesirable legislation. But now we are beginning to observe a new approach—legislation originating in international organizations but designed to change our domestic way of life.

Our Constitution says that a treaty adopted by our Government becomes the supreme law of the land, superseding state and local laws. This country is a member of the International Labor Organization, a hold-over agency from the League of Nations but now a subsidiary of the United Nations. To the ILO meetings we send representatives to speak for our Government, our labor, and our management. On controversial social and medical matters, the American labor and Government representatives invariably join to outvote management. One of the treaties so formulated and indorsed would set up within this country a system of compulsory national health insurance more comprehensive even than that proposed in the Wagner-Murray-Dingell bill.

If this proposal of the ILO is approved by only a two-thirds majority of the Senators, the executive branch of the government will be under a moral obligation to put it into effect. The next step, the final step to out-and-out socialized medicine, would be passage of enabling legislation. You can readily see that these international conventions, worthy as many of them may be, will have to be watched with the same diligence we have focused on other Federal legislation.

Our profession must be ready at all times to cope with the changing methods of legislation which are designed to interfere with our Constitutional liberties.

Frank E. Wilson, M.D.
Director, Washington Office,
American Medical Association

THE DISTRICT OF COLUMBIA TUBERCULOSIS ASSOCIATION

Within the shadow of the dome of the Capitol a mother sat by the cot of her dying son in a poorly ventilated, ill-lighted, overcrowded, poverty-stricken tenement. She had watched the boy grow weaker and thinner, while fever and cough consumed his strength. The year was 1902. There was little money for food and medicine and no facilities for protection of her other children, because they all lived in one room. The Associated Charities learned that a colored boy was desperately ill, and they dispatched a "friendly visitor," who was one of their colored social workers, to investigate and to relieve the situation if relief was possible. The Physician to the Poor was summoned, milk and eggs and medicine were supplied, but the boy died within 10 days.

The "friendly visitor" was disturbed that such things could happen in the Nation's Capital, and he arranged to have 2 assistants appointed to help him in his plan to disseminate information which would awaken the public to the need for prevention and early treatment for "consumption." The committee of 3 arranged for lectures in the Negro churches, and for the distribution of circulars in the schools, printed by the D. C. Health Department, to inform the people of the necessity of good hygiene. This was the first organized effort in Washington to combat tuberculosis, and from this effort grew the D. C. Tuberculosis Association, which now boasts 23,000 members. The persons who comprised the original committee of 3 were W. S. Duffield, E. H. Hunter and the Reverend Daniel E. Wiseman. These people should be remembered and honored as pioneers in this important endeavor. The story from here on is one of effort and disappointment and delay. Attempts to interest Congress in the need of special dispensary and hospital accommodations were not rewarded until 1906, when $107,500 was appropriated for the erection of the Municipal Tuberculosis Hospital at 14th and Upshur Streets.

As early as March 7, 1894 the Medical Society of the District of Columbia appointed a committee to recommend measures to check tuberculosis, which was causing many deaths in the city. The committee, composed of Drs. C. H. Stowell, J. H. Bryan and E. A. Balloch, proposed that a circular of instruction be prepared and popularly distributed, to set forth the dangers of contracting the disease, and steps to be taken for prevention. The committee also proposed that special hospitals be erected for the treatment of tuberculosis. I can find no record of action by the Society on these recommendations, but on January 1, 1906 (after the Tuberculosis Association had been in existence for 4 years) the Society endorsed the project of the District Commissioners for the erection of a hospital for consumptives. On March 28, 1906 the Medical Society urged Congress to enact laws, providing for legal supervision of tuberculosis, and reporting its incidence.

BUY CHRISTMAS SEALS

The accompanying brief history of the District of Columbia Tuberculosis Association, presented by Dr. Gannon at the 50th Anniversary Meeting of the Association, is in itself an eloquent appeal for support of the activities of this voluntary health organization. The Tuberculosis Association is financed solely by the sale of Christmas Seals. It engages in four major activities, education, case-finding, rehabilitation, and social research. Through affiliation with the national organization it shares in the support of a broad program of medical research.—EDITOR'S NOTE.

Meanwhile, Dr. George M. Kober interested his medical friends in erecting the Starmount Sanitarium in Washington Grove, situated 20 miles from Washington, where patients were accommodated for $10.00 per week. Four tents were erected on the grounds of the Washington Asylum Hospital for the accommodation of 40 patients who were unable to afford $10.00 per week. These measures proved inadequate for the number of patients who needed treatment, and the Association continued to knock at the doors of Congress until the funds for Glenn Dale Sanatorium were supplied. This hospital opened its doors in 1936. Its cost was $1,800,000. The problem of the Tuberculosis Association since then has been to try to obtain a budget large enough to hire a sufficient number of doctors, nurses and other help to serve the needs of the community. Wards have been closed because of the inability to employ personnel, and many advanced cases of tuberculosis cannot obtain accommodations, with the result that families and associates of these people are in danger of becoming candidates for admission to the hospital themselves.

The mortality statistics for the District of Columbia today are higher than the States of the Union except Arizona, which, because of its reputation for climate, is a mecca for sufferers from tuberculosis from all over the country.

While awaiting the erection of hospitals, the Tuberculosis Association has not been idle with respect to the care of ambulatory tuberculous patients. In 1904 they enlisted the help of the Citizens Relief Association and the Instructive Visiting Nurse Society, and established the first free dispensary for the treatment of the disease. Education and information were supplied, together with milk and eggs for the destitute. In 1918 this dispensary was replaced by the first Municipal Health Clinic for the diagnosis and treatment of tuberculosis.

The District of Columbia Tuberculosis Association was instrumental in securing the passage of laws which forbade spitting in public places (1903) and made registration of all persons with tuberculosis with the Health Department compulsory. Free sputum examinations by the city bacteriologist and the disinfection of premises previously occupied by patients were instituted.

The standardization and pasteurization of milk in the District were due to the efforts of the District of Columbia Tuberculosis Association. In 1907 they planned the Washington Milk Conference, when, for the first time, milk standards were established similar to those in all larger cities in the United States. The Association is credited with contributing much to the national campaign for the pasteurization of milk.

The National Tuberculosis Association was started in Atlantic City in 1904 and in 1905 held its first meeting in Washington.

This thumbnail sketch of the early history of the District of Columbia Tuberculosis Association is not complete. I advise a visit to headquarters on 18th Street, where its many activities can be seen at first hand.

The Association was born in poverty and squalor. It has worked against great odds, including indifference of legislators and the public generally. Its life has been devoted to public education and public relief, and its 23,000 members are among the unsung heroes of the world.

James A. Gannon, M.D.

THE ABUSE OF ENDOTRACHEAL ANESTHESIA

Anoxia is the greatest hazard in anesthesia. Its commonest preventable cause is obstruction to respiration. This obstruction occurs most frequently in the throat area.

Simple adjustment of position, usually with head extended, is sufficient to overcome obstruction in most cases. Such correction, however, may be short-lived, and frequent readjustment may be needed. To simplify this problem the oropharyngeal airway was developed. This curved breathing tube of wire, plastic, or similar firm material has become the most important and most frequently used single instrument in all anesthesia.

Still there are airway requirements which are not met by this simple device. For some of these we have the nasopharyngeal airway, which is a soft rubber tube lubricated and passed gently through one nostril to the base of the tongue, not quite far enough to stimulate the glottis.

For the most trying problems of airway control it is now generally agreed that endotracheal anesthesia is the best answer. For 3 decades this technic has been used with increasing frequency, and as facility has developed indications have broadened.

In many centers it has become customary to pass a flexible tube either through mouth or nose into the trachea, not only for anesthesia in operations involving the head and neck but in cases in which the patient may be prone or even in some cases to improve airway patency for abdominal surgery. Indeed, for teaching purposes some students are learning to use the technic on patients for such procedures as cystoscopy and bunionectomy. It is admitted that such a technic can be popularized only when employed by many practitioners and that they in turn must have used it sufficiently not to be afraid of it. With increased use of the technic it becomes even more important to stress the pitfalls that must be avoided.

The placement of a foreign body in the larynx is strong stimulation to important reflexes. It can be done only under deep general anesthesia or under local (topical) anesthesia except in the few cases when dexterity or even fortunate accident aid in the accomplishment of the procedure with reflexes active.

Intravenous anesthesia, especially with muscle-relaxing drugs added, may be used to speed up things. As the anesthetist becomes more skillful the tendency under pressure to take short cuts is always enticing.

It has even been pointed out that rapid scrub technics with the new detergents may lead the surgeon to greater impatience and thus add to the patient's danger.

On all sides are reports to indicate shocking frequency of cardiac arrest. Many factors have been studied, including the extension of surgery into bigger, new fields. Criticism has been aimed at muscle-relaxing drugs and certain other anesthetic drugs as being exceptionally hazardous.

Since it is generally admitted that anoxia is basic to the problem in most instances, and since careless endotracheal manipulation is grossly upsetting in this regard, we could well use this as the jumping-off point for a worthwhile educational effort.

The anesthesiologist should resolve: (1) to use strict indications in his teaching of endotracheal anesthesia to students; (2) to stress conservative, slow methods of intubation with careful, continuous observation for any oxygen deficiency; (3) to consider every intubation a major anesthetic procedure not to be undertaken lightly; but (4) to use every means to spread the truth that, with all this, endotracheal methods are still far safer where there is otherwise a hazard to the airway from position, inaccessibility, blood or other factors.

The surgeon should resolve to remember that as a member of the team responsible for the patient's welfare he must coöperate at least with patience rather than court danger with pressure for induction speed.

The stakes are too high for anyone to be careless or complacent.

D. S.

In and Out of Focus

BY THE OBSERVER

Post Assembly Observations

When your Observer mentioned to his secretary that he proposed to comment on the 23rd Annual Scientific Assembly in this month's column, she observed laconically that it would be boresome reading. Postmortems of such meetings, she said, are always dry and uninteresting. There is nothing to write about anyway except what has already appeared in the Medical Annals. These disparaging observations served only to stiffen your Observer's resolve to demonstrate that he could write about the recent Assembly without repeating facts that have already been published.

There may be some differences of opinion as to the basis for determining a meeting's success but there is no more essential factor than attendance. Without large and enthusiastic participation a meeting of the type of the ASSEMBLY would be impossible. This year the attendance was virtually a standoff with the 1951 ASSEMBLY. Here are the figures:

Physicians	1,701
Medical Students	635
Nurses	249
Dentists	9
Pharmacists	22
Scientific, Public Health and Technical Exhibitors	303
Allied health personnel, including X-ray and Laboratory Technicians and other guests	501
Total	3,420

Of the many ingredients that go into the making of the ASSEMBLY none is more important than its scientific content. In fact, it is really the only reason for the ASSEMBLY's being. All else is seasoning to make it more palatable.

When the preliminary program for the ASSEMBLY made its appearance, favorable comments were increasingly heard. Many observed that the program promised to be the finest to date. Certainly the Program Committee had combed the country for outstanding medical talent, with Washington well represented. As it turned out the promise was more than fulfilled. The best evidence of this was the fact that the Presidential Ballroom at the Hotel Statler was filled to near capacity most of the three days.

The Round Table Discussions were equally successful. In fact, it is now evident that the Discussions are not only a permanent feature of the Assembly but will have to be increased in number if not in size. This year there were two on the second day of the ASSEMBLY and an equal number on the third.

No finer Scientific Exhibit has ever been on display than the one this year. More than 65 applications for space in the Exhibit were received. Because of the lack of space, the Committee had some difficult decisions to make. In an effort to include as many exhibitors as possible an additional room was obtained. Even then only 23 exhibits could be shown.

For the first time in several years awards were made for the best scientific exhibits. The awards went to the following:

First: Prevention of Allergic Transfusion Reactions, by Harry E. Ferris, D.D.S., Seymour Alpert, M.D., and Charles S. Coakley, M.D., Department of Anesthesiology, George Washington University Hospital.

Second: Surgical Anatomy of the Portal System, by John L. Madden, M.D., John M. Loré, Jr., M.D., and Frank P. Geruld, M.D., St. Clare's Hospital, New York City.

Third: The Use of Radioactive Colloidal Gold (AU-198) in Pleural Effusions and Ascites Associated with Malignancy, by Commander E. R. King, M.C., U.S.N., U.S. Naval Hospital.

Three exhibits were awarded Honorable Mention:

1. New Frozen Section Technic, by Vannevar Bush, Eng.D., and Richard E. Hewitt, Research Assistant, Carnegie Institution of Washington; Theodore Winship, M.D., and Thomas Bradley, M.D., Garfield Memorial Hospital.
2. Systemic Lupus Erythematosus, by John R. Haserick, M.D., A. C. Corcoran, M.D., Harriet Dustan, M.D., and Lena A. Lewis, M.D., Cleveland Clinic, Cleveland, Ohio.
3. The Early Clinical Use of Radio Elements, by Lieutenant William B. Looney, M.C., U.S.N., Commander E. Richard King, M.C., U.S.N., and Ensign Martin Colodzin, M.S.C., U.S.N., U. S. Naval Hospital.

The Public Health Exhibit was up to its usual high standard and attracted greater numbers of professional and lay people. Here too the space available was entirely inadequate.

The American Heart Association, which assumed the responsibility for the Public Meeting, presented a program that attracted about 800 persons. Naturally, there were a number who desired to see and hear Myrna Loy (Mrs. Howard Sargeant), the motion picture actress, a charming participant in the panel discussion on The Three R's (Research, Recovery and Rehabilitation) of Heart Disease. Personally, your Observer found the discussion by the panel of distinguished physicians and laymen highly interesting and quite superior to many medical programs prepared for the laity.

DRS. MOORE AND COSTENBADER HONORED BY MEDICAL SOCIETY

Dr. Wallace M. Yater (center), President of the Medical Society of the District of Columbia, has just presented Certificates of Merit to Dr. William Cabell Moore (left) and to Dr. Frank D. Costenbader (right). The presentation was made at the Annual Banquet of the Society, October 1, during its 23rd Annual Scientific Assembly at the Hotel Statler.

It isn't often that luncheon speakers are as uniformly excellent as those who addressed the various luncheons. Dr. Paul B. Magnuson's speech is referred to elsewhere in this column. Other speakers and their subjects were: Dr. John A. Trautman, Director, Clinical Center, National Institutes of Health, who spoke at the luncheon sponsored by the George Washington University Medical Society on "Plans for the Clinical Center of the National Institute of Health"; the Honorable Karl E. Mundt, Senator from South Dakota, whose subject at the Georgetown University Medical Alumni Association luncheon was "Medicine in a Changing Time"; and Dr. Winfred Overholser, who addressed the luncheon sponsored by the Woman's Auxiliary to the Medical Society on "Some Thoughts on Normal Living."

At the Women Physicians' Dinner, Dr. Irene A. Koenecke of the Hertzler Clinic, Halstead, Kansas, spoke on "A Woman Physician Visits South America" and showed as fine kodachromes as your Observer has seen.

As is customary the Annual Dinner brought the Assembly to a close. Dr. Vannevar Bush, President of Carnegie Institution of Washington, was the principal speaker. Those who heard his thoughtful address will wish to read it when it is published in a subsequent issue of the Medical Annals.

The two recipients of the Certificates for Meritorious Service were Dr. Frank D. Costenbader and Dr. W. Cabell Moore. Dr. Costenbader, a Past President of the Medical Society, received his Certificate "in grateful acknowledgment of his service to the medical profession and the people of the District of Columbia. First President of Medical Service of the District of

MEDICAL BUREAU
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THE ANNUAL ASSEMBLY AS RECORDED BY THE CAMERA

(1) Dr. Paul B. Magnuson, addressing the Medical Society Luncheon; (2) Dr. Vannevar Bush (left), guest speaker at the Annual Dinner; Dr. Bush and Lt. William B. Looney, MC, USN (rear) receive Honorable Mention Certificates from Dr. Alfred A. J. Den; (3) Senator Karl E. Mundt; (4) Theodore Wiprud (left) and Lawrence A. Zupan (right) before

(*Continued on page 621*)

Columbia, he is largely responsible for its existence and for the efforts of the medical profession to make the costs of medical care less burdensome to the citizens of the Nation's Capital. In all this he has revealed a deep sense of duty, untiring patience, unquestioned integrity, and undaunted courage."

Dr. Moore, long Chairman of the Society's Committee on Industrial Medicine, was given his award "in grateful acknowledgment of his service to the medical profession and the people of the District of Columbia. A pioneer in industrial medicine, he rendered conscientious and skillful service to the employees under his supervision. As Chairman of the Medical Society's Committee on Industrial Medicine, he labored diligently and successfully in the interest of justice to physicians and to their patients. His every act has revealed him to be a man of unquestioned integrity, sympathetic understanding and genuine courage."

Dr. Wallace M. Yater, President of the Society, was an excellent presiding officer. It was a full three days for him, for he was not only chairman at two scientific sessions but also presided at the luncheon sponsored by the Society on the opening day of the Assembly. In addition he was guest at two luncheons and welcomed those who attended the Public Meeting.

If there are many ingredients in such a meeting as the Assembly there are also many hands that make the meeting possible. Heading the Committee on Arrangements was Dr. William J. Tobin, who was indefatigable in his efforts to make the 1952 Assembly the best to date. He should be pleased with the many comments from his fellow physicians to this effect. Your Observer wishes also to testify that Dr. Tobin was not only one of the most capable General Chairmen but one of the most thoughtful and patient. Associated closely with Dr. Tobin was Dr. Jonathan Williams, Vice Chairman, and the next year's General Chairman.

None received higher praise from Dr. Tobin than Dr. Ralph M. Caulk, Chairman of the Program Committee, and Dr. A. A. J. Den, Chairman of the Committee on Scientific Exhibits. They displayed unusual ability and their talents should not be neglected by the Society in the future. They, of course, had the close cooperation of the members of their respective committees.

Others on the General Chairman's list for commendation were Dr. James J. Feffer, Chairman, Public Health Exhibit Committee; Dr. Frank S. Ashburn, Chairman, Radio, Television and Motion Pictures Committee; Dr. William T. Gibb, Chairman, Attendance Committee; Dr. Lawrence A. Rapee, Chairman, Committee on Social Affairs; Dr. Helen Gladys Kain, Chairman of the Committee on Women's Activities, (an interested and loyal supporter to whom the Society is deeply indebted), and members of their respective committees.

Mention was also made of the splendid cooperation given by the Woman's Auxiliary, especially by Mrs. Rapee, a tireless and capable worker, and the staff at the Society's Executive Offices.

Having watched the Assembly grow from adolescence to maturity, your Observer is naturally pleased that the last was considered the best of all Assemblies. The Assembly is the high spot

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(*Continued from page 620*)

the Medical Bureau booth, where Miss Mary M. McCambridge (left) and Mrs. Elizabeth M. Lenderman are accepting calls for doctors; (5) Dr. Wallace M. Yater, President of the Medical Society; (6) Dr. Winfred Overholser, speaker at the Woman's Auxiliary luncheon, flanked by (left to right) Mrs. Lawrence A. Rapee, Mrs. Overholser and Mrs. Ernest E. Hadley, President of the Auxiliary; (7) Dr. William P. Herbst discussing the George Washington Luncheon with Mrs. Anna Ayers; (8) Drs. Charles S. Coakley, Harry E. Ferris and Seymour Alpert, winners of First Award in the Scientific Exhibit; (9) Dr. John A. Trautman, Director of the Clinical Center, USPHS; (10) Dr. John L. Madden, whose scientific exhibit, prepared with Dr. Loré and Dr. Geruld of New York, won Second Award; (11) Dr. William J. Tobin (center), General Chairman for the Committee on Arrangements, with Dr. Ralph M. Caulk (left), Chairman of the Program Committee, and Dr. Den, Chairman of the Committee on Scientific Exhibit; (12) Left to right: MT W. T. Noel, RCN, Lt. J. E. McClenathan, MC, USN, and Lt. R. P. DeLong, standing before the Navy exhibit which received the Third Award.

in any President's administration and Dr. Yater, too, is understandably pleased with the latest "show."

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"... Our Plain and Simple Duty ..."

There have been many favorable comments on the excellence of the talks given at the various luncheons during the ASSEMBLY. Certainly one of the most thought-provoking was that given by Dr. Paul B. Magnuson, Chairman of the President's Commission on the Health Needs of the Nation. The title of his talk, "Mental Processes of the President's Commission on Health Needs," was sufficient to arouse much speculation. Those who knew Dr. Magnuson expected him to "lay it on the line," which he did.

For a number of years the adequacy of the present system of providing medical care has been an explosive subject, highly charged with emotionalism. This has been doubly so where physicians are concerned, particularly when an investigation is undertaken by a Governmental body. Even as sturdy an individualist and firm believer in private practice as Dr. Magnuson, it seems, has been unable to overcome the suspicion that the conclusions of his Commission will be prejudiced in favor of President Truman's views on medical care.

As has already been intimated, Dr. Magnuson is not the type to take unfriendly criticism lying down. His fighting instincts are easily aroused and on a number of occasions he has vigorously protested the attitude of the officials of the AMA toward the Commission. He resents their lack of confidence in his ability to avoid political pitfalls and what he considers a reflection on his integrity. He also believes it unfair for organized medicine to prejudge the Commission, a view also held by many other physicians, among them prominent medical leaders.

Your Observer has heard Dr. Magnuson speak about the Commission and its activities on at least three occasions. Each time Dr. Magnuson has related, with the utmost candor, why he was chosen for his present position and the conditions of his acceptance. Stressed by him was the fact that he told the President he was not in favor of compulsory health insurance and, if appointed, would not tolerate any interference in carrying out his assignment. The Commission, it was understood, would make its report early in 1953 so that its findings could not in any way be influenced by the political campaign.

As he made clear to his ASSEMBLY audience, Dr. Magnuson was not only addressing them but every doctor in the country when he said:

"It is our plain and simple duty as doctors to furnish leadership in every national, state, and community effort to look into ways of improving health conditions in America. If we abdicate this responsibility; if like Marie Antoinette we say, 'Let them eat cake,' then other elements in our society will take over and we will find ourselves under a distasteful system of medical care. If organized medicine is to retain its rightful place of esteem in our society, it had better cease and desist at once from its current policy of proclaiming that it alone can decide whether there are any health problems in this country, and that it alone can decide what the average doctor should think about the pressing problems of the day."

Dr. Magnuson said that he alone was responsible for the selection of the 14 members of the Commission, the only suggestion made by the President being that they not be confined to the medical profession. He paid special tribute to the labor leader, Walter Reuther, who, he said, "epitomizes in his courageous career the boundless enterprise of our country."

The "blueprint of action" was drawn up at the first meeting of the Commission and has been followed closely ever since. To begin with, an attempt was made to assess the total resources of the country, a job that is being done by the technicians employed for that purpose. There followed an effort to estimate the health needs of the American people. In this undertaking a series of 30 all-day panels were scheduled in Washington on every phase of medical care.

Finally, hearings were held at various points throughout the country for the purpose of obtaining opinions of interested groups at the grass roots. It was at these meetings that wide divergencies of opinion were expressed over the methods adopted by the Commission. Especially critical were the representatives of the state medical societies. Objections were raised to the limited time in which to complete the investigation and the manner in which the proceedings of the hearings were summarized.

It is not your Observer's purpose to appraise the merits of the differences which have arisen between Dr. Magnuson and organized medicine but rather to report briefly on Dr. Magnuson's talk, which will be published in full in an early issue of MEDICAL ANNALS. In the final analysis, the Commission's report will speak for itself. Dr. Magnuson promises that it will be "a powerfully annotated, realistic, honest, and fresh approach to the vast problem of providing better medical care for all the people."

"We will not come up with any shining utopias or any magic devices to prevent death," he said, "but I have the utmost confidence that our proposals will inject some badly needed light where only heat has prevailed in the past few years."

It seems to your Observer that it would be the better part of wisdom for medical leaders and the organizations they represent to wait and see the end result of the Commission's efforts before becoming too vocal in their criticism.

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The Colorado Meeting

There is nothing like a complete change of surroundings to sharpen one's perspective and to emphasize the fact that no matter how much experience one has had, he has still much to learn. As is well known to those who know him, your Observer is a veteran in medical organization work. Sometimes he has the feeling that he has heard and seen everything pertaining to his job. Of course, he is mistaken. This was forcefully brought home to him when, upon the invitation of the Colorado State Medical Society, he participated in its annual meeting last September.

There were several firsts for him on his journey west. It was his first nonstop flight across country. That in itself was an exciting adventure. Then, too, it was his first visit to Colorado, a state about which he had heard a great deal and which, upon inspection, more than lived up to his expectations. It was also his first appearance on the program of a medical society west of the Mississippi River.

Upon landing at Denver, he was met by a tall, handsome Westerner, the Public Relations Director of the Colorado Society, Evan Williams. Mr. Williams, who proved himself the most delightful of companions, drove him to Estes Park some 60 miles away.

Stanley Hotel in Estes Park, where the meeting was held, is beautifully situated, surrounded as it is by high, craggy mountains. The view from the dining room was awe-inspiring, especially in the early morning. Estes Park is 7,500 feet above sea level, and the "tenderfoot" finds it advisable to take it slow physically. Nevertheless, the air was invigorating and your Observer enjoyed the change of scene.

But here the travelogue ends, because it is not your Observer's purpose to write at length about the beauties of nature but to point up the statement he made in the beginning, that no matter how long one's experience there is always something to be learned.

The West is famous for its hospitality and your Observer discovered the real thing in Colorado. Upon reaching his hotel room he found heart-warming evidence of this. On the dresser was a beautifully printed card welcoming him by name as guest of the Society, a tastefully arranged basket of fruit, a bottle of spirits of the finest vintage, and a letter stating what arrangements had been made for his comfort. Other guest speakers, of course, received the same treatment. They must have felt the elation and pleasure your Observer did at being so cordially welcomed.

This spirit of cordiality was in evidence throughout the four days of his visit. Your Observer came away with the feeling that he had learned something about the refinements of cordiality and friendliness toward visiting speakers.

Most impressive of all was the manner in which the Society's House of Delegates dealt with the problems confronting it. These, of course, were not so different from those which exist elsewhere. For example, the Society's Board of Supervisors (which performs the same functions as our Grievance Committee) came under discussion. A tall, quiet spoken physician read the Board's report which it soon became apparent was no "run-of-the-mill" affair but a courageous and outspoken statement of honest beliefs and strong recommendations. It was enthusiastically received by the House. Here are some excerpts:

> "From the hearing of much testimony regarding medical fees the Board feels more and more strongly the need for discussion and understanding of fees before service is rendered, the necessity of calling the patient's attention to the fact that such fees do not include hospitalization, X-rays, laboratory fees, etc. It would be well to check with the patient on those tests deemed necessary to aid in diagnosis. Correct itemized bills would show clearly to the patient where charges are for laboratory work and special procedures. There should be no long delays in the rendering of bills. The patient who comes into the doctor's office for what he considers a minor treatment should be given an explanation when it is the feeling of the doctor that a complete physical examination and extra tests are indicated. A patient should be made aware of the fact when it is obvious that his Blue Shield or other medical insurance will not cover the total bill. When treatment proves ineffective, a doctor might well become his own public relations officer and reconsider the original fee in view of the results obtained. . . .
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> "In the 1950 annual report of the Board of Supervisors is the following quotation: 'The Board is convinced that many of the disputes revolving around costs of medical care could very easily have been obviated had the physicians involved given more personal attention to patients complaining about charges—affected patients were not permitted to talk to the physician but were required to discuss their financial woes with the office personnel who either could not, or at least did not, give them any satisfaction. The practice of delegating the responsibilities for discussing costs of medical service to employees is vicious and results in poor patient-doctor relationships.' . . .
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> "In approximately 25 per cent of the complaints heard, the charges were of incompetent diagnoses or ineffective treatment. Patients are naturally dissatisfied if the treatment is ineffectual, and here it is the feeling of the Board that the physician might do well to broaden the responsibility in the care of such a patient. Several complaints were based on the apparent refusal of the physician to have consultation. The complainant might well have been satisfied and continued with the original doctor had only his confidence been bolstered by the opinion of another physician. . . ."

Of course, the reading of the above report was followed by vigorous discussion but there was little dissent. In few sections of the country would it have been accepted without some protest. But these men were determined to face realities in the belief that only thus could medicine be saved from outside interference, and the continuance of private practice assured.

There were other matters of considerable consequence which came before the House—voluntary health insurance, legislation, public health projects, and public relations—all dealt with intelligently and firmly.

Your Observer was especially impressed by the smoothness with which the affairs of the House were conducted. Motions were properly stated and all reports and discussions were brief and to the point. Much credit for this was given to the Speaker of the House, who acquitted himself exceedingly well, and to Harvey E. Sethman, Executive Secretary of the Society, a man of outstanding executive ability and widely recognized as one of the best in his field.

All in all the Colorado meeting was an enlightening experience to your Observer and he returned home resolved to benefit by it.

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Our Crippled Children

About a month ago Dr. William P. Argy, Medical Director of the District of Columbia Society for Crippled Children, handed your Observer a copy of his annual report for the organization year 1951–1952. As too frequently happens, he carried the report around in his brief case for a week or so before he finally found time to go through it. He was deeply impressed and called the office of the Society for additional information, which was promptly forthcoming.

It is a stony-hearted individual indeed who is not touched by the plight of crippled children. As a matter of fact, most of us are very sentimental about children and our emotions are easily aroused when they are in distress. But much more than sympathy is required where these children are concerned and that is where the Society for Crippled Children has met a vital community need. Its efforts to salvage the lives of unfortunately afflicted children is one that deserves the highest commendation. Voluntary workers in the organization who have given so generously of their time and money to this worthy cause—and they include distinguished civic leaders as well as physicians—must feel a deep sense of satisfaction.

Reports at best are not exciting reading but Dr. Argy has marshalled facts which speak eloquently for a program for which he is largely responsible. The following are what your Observer considers the highlights of his report:

During the organization year 1951–52, 436 children came under the Society's observation. Of this number 292 were referred by physicians. Other sources of referment were:

Children's Hospital	47
Walter Reed Army Hospital	18
D. C. Government Facilities	34
Naval Hospital	12
Out-of-state	77
Freedmen's Hospital	3
Georgetown Hospital	2
Prince Georges County	2
Virginia Society	4
Not Indicated	15

An analysis of the above group reveals that 98 were under the age of 3, 147 were between 3 and 7 years, 109 from 7 to 15 years, and 14 above 15 years. In 53 instances no age was recorded.

The report points out that the incidence of cerebral palsy is estimated at 150 a year in the Washington Metropolitan Area. The fact that the large number of those reported are in the lower age groups, Dr. Argy said, is probably indicative that the benefits of early treatment are more widely recognized.

The Society sponsors consultation clinics in which medical facilities of every type are available for study of the "whole child." Examinations were made of 76 children in the Pediatric Clinic, 78 children in the Ear, Nose and Throat Clinic, and 65 in the Eye Clinic. In addition, special tests were made such as psychometric evaluations, hearing tests, electroencephalograms, and so on.

The Cerebral Palsy Clinic is described as "the hub about which our whole organization revolves." The report states that 300 children were observed in the Clinic and that during 13 clinic sessions 494 examinations were made.

In what Dr. Argy calls "the School" an effort is made to rehabilitate the child so that he can "compete in a normal environment." The records show that no matter how severe his handicap, the child improves to some extent because of his association with the School.

And finally there are provisions for special treatment including physical, occupational, and speech therapy.

Obviously these facts and others not mentioned deserve amplification, but space does not permit. Their object is to attract the attention of physicians who are not familiar with the Society for Crippled Children. If they serve this purpose, your Observer will be content.

He noted with pride that in the brochure sent him the names of physicians on the Society's Scientific Council were, without exception, the names he would expect to find there.

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Burdened by Details?

Demands of modern life weigh heavily upon most of us. It often seems that our obligations are endless, and details swamp us to the point where in desperation we protest, "I have so much to do I haven't time to enjoy life," or, "What can I do to lighten the load I am carrying?"

Your Observer has no panacea to offer in this situation but experience has taught him that the only relief lies in being systematic and in organizing one's affairs in such a way that less attention need be given to details.

A practical method by which doctors can accomplish this is by preparing a manual for their employees setting forth in detail their duties and the manner in which they should be performed. Such a manual has been in use for several years in the offices of our Medical Society. It was designed especially for the telephone operators employed by MEDICAL BUREAU and contains the more common medical terms, a list of the healing cults not recognized by the medical profession, the names of the medical institutions in the community, and something about them. In addition there are detailed instructions to operators as to how they should respond to inquiries from physicians and patients as well as to their attitude toward the people with whom they deal. They are also provided with a wide variety of factual information pertaining to medical activities in Washington.

As previously suggested, a manual or guide adapted to the doctor's needs would contribute much to the efficiency of his office and shorten considerably the training period of new employees. It should contain facts which the employee should know about procedures in the office, detailed instructions relative to the employee's duties, such as her approach to the patient, the keeping of financial records, the manner of making bank deposits, when bills should be sent to patients, and the extent to which they should be itemized. Dates on which certain duties must be performed should also be included as, for example, when income tax returns must be made and insurance premiums paid. A list of medical meetings which the doctor wishes to attend, together with the usual traveling and hotel accommodations wanted, would also be helpful. To play safe, the doctor's wife's birthday and their wedding anniversary should be noted.

This is, of course, only a partial list of what such a manual might contain. The important thing is that where possible the doctor be relieved of all details which his employees are capable of taking care of.

Obviously, the suggested manual will be of little value unless the employee is capable of assuming responsibilities. The physician who has in his employ a competent secretary or office assistant is fortunate and should make the most of her competence. Needless to say, he should also recognize her ability by adequate compensation and expressions of appreciation. Doctors who employ office help primarily because of their willingness to work for a small salary may well find such economy costly.

In proposing a manual, your Observer takes it for granted that the employees are competent. In these circumstances he is certain that a thoughtfully prepared manual will ease the physician's burdens materially.

T. W.

SAINT ELIZABETHS HOSPITAL—A CENTURY OF TRADITION*

WINFRED OVERHOLSER, M.D., Sc.D.
Superintendent, Saint Elizabeths Hospital, Washington

When Dr. William A. White was appointed superintendent following the death of Dr. Richardson in 1903, a large number of buildings were well under way, and in 1904 we find record of 10 of these new buildings being occupied. On the medical side Dr. White established a new classification for purposes of diagnosis and instituted weekly staff meetings. One of his very early innovations was a psychologic laboratory under Shepherd Ivory Franz, one of the first such laboratories in the entire country. In his annual report for 1907 he stated that "the psychological laboratory will in the future be considered as much of a necessity in connection with the asylum or psychiatric clinic as the pathological laboratory was formerly." He looked upon this as "a step toward the creation of a strictly scientific department for the study of mental diseases" and considered it "fitting that this Hospital should take its place in the foreground of advance in this direction and add its quota to the sum of knowledge on this very important subject." The work of this laboratory, the roster of whose workers embraces such names as Boring, Lashley, Kent and Richmond, has been widely noted and influential.

Dr. White was not lacking in interest in the pathologic work as well. In 1908, for example, he appointed Nicolas Achúcarro as histopathologist. Achúcarro, a brilliant Spaniard, a former student of Marie, Kraepelin and Alzheimer, who died all too young, was one of the most promising men in the history of neuropathology. The names of many other distinguished workers in the pathologic laboratory who are still living come readily to our minds.

In 1909 Dr. White established the *Bulletin*, which ran over a period of 20 years, the last number appearing in 1932. The first volume, for example, had articles by Drs. White, Blackburn, Franz, Achúcarro, O'Malley, Hough and Henry Miller. In the opening article Dr. White said, in addressing the staff, "With your assistance I trust to make this as good as any if not the best hospital of its kind in the country." How well he has succeeded in achieving this result we all know. It is largely due to Dr. White's enthusiastic and brilliant administration of the Hospital that this institution is today one of the most widely known public mental hospitals in the entire world. One tribute which has been paid to the reputation of the Hospital is the fact that each of its five superintendents has served as president of the American Psychiatric Association—a record probably unequalled by any similar institution in the United States.

During this period psychoanalysis was just beginning to be heard of. Brill had translated some of Freud's works in 1908, and these were eagerly seized upon by Dr. White. In the 1910 issue of the *Bulletin*, for example, one article by him, listed as having appeared in another journal, is on "The Theory, Methods, and Psychotherapeutic Value of Psychoanalysis." The literary output of the staff in those days was very considerable. *Bulletin* no. 3, issued in 1911, for example, contained a bibliography of no less than 126 titles written by members of the staff. Dr. White encouraged the staff members to write. Just as Saint Elizabeths was one of the early mental hospitals (1891) to have a special ward for offenders, so some of the earliest American writing on forensic psychiatry emanated here from the pen of Dr. Bernard Glueck—a line of interest continued with significant results by Dr. Ben Karpman. Dr. Edward J. Kempf's important volume on psychopathology was written here, and some of Korzybski's early studies on semantics were prosecuted at Saint Elizabeths. It is unfortunate that today the preoccupation of younger staff members with their analytic training, and the apparent preference of most physicians to be considered along with the other employees as affected strictly by the 40-hour week, render the literary production of staff members sadly deficient. The readiness to observe, to investigate, and to put on paper the results of one's investigations and inferences therefrom should be redeveloped if psychiatry is to continue to progress.

Dr. White was early impressed with the importance of psychotherapy in the hospital setting, and as early as 1917 he had assigned Dr. Kempf as clinical psychiatrist, freed from administrative duties. That policy has been continued, and the Psychotherapeutic Branch today numbers 3 physicians and

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* This article is continued from the October, 1952 issue of the Medical Annals.

2 lay therapists, one in the field of art and one in the field of dance and music.

The advent of World War I again laid a heavy duty upon the Hospital. The course for medical reserve officers was established and detachments from the Army and Navy were sent to the Hospital for training. At the close of the War, there being no other mental hospitals under the Federal Government, it became necessary to erect the "semipermanent buildings," now no longer standing. It was at this time, too, that the Red Cross Unit was established at the Hospital, a unit which has functioned most helpfully, not only to the military and veteran population of the Hospital but to all of the other patients as well.

Another innovation of Dr. White's, made in 1920, was the establishment of the Department of Internal Medicine, as he referred to it in the report for that year, now known as the Medicine and Surgery Branch. This Branch has added greatly to the care of the patients of the Hospital and has given Saint Elizabeths the unique distinction of being still the only public mental hospital in the United States which is approved for a rotating internship. This Branch is unique, perhaps, too, in being still under the direction of the physician who was its first director, Dr. Eldridge. During this period occupational therapy and (a little later) social work were introduced into the Hospital. On the educational side, there was a constantly growing interest in the training of medical students, interns, and residents, and in 1923 a postgraduate school for Veterans Bureau physicians was organized. The revolutionary work of the Medicine and Surgery Branch in the introduction of malarial therapy for general paresis in the Western Hemisphere has already been mentioned. Much other work was going on in the laboratory and elsewhere. Physical therapy was being developed; beauty parlors were introduced; clinicopathologic conferences were organized, and a considerable amount of investigative work in many fields was encouraged by Dr. White. New therapies, such as the sodium amytal interview devised by Lorenz and Bleckwenn in 1930, were adopted promptly as they demonstrated their usefulness. At the time of his death in 1937 Dr. White was, in my opinion, the most eloquent, forceful, and progressive psychiatrist in this country, and he had achieved for Saint Elizabeths, always a highly regarded institution, an enviable position in the ranks of mental hospitals. The esteem in which he was held was indicated by the fact that during his lifetime, largely through the efforts of Dr. Harry Stack Sullivan, the William Alanson White Psychiatric Foundation was established, an organization which has done valuable work in the fields of education and of publication.

In 1940, when I had the pleasure of presenting before this Society a paper entitled "Saint Elizabeths—Past, Present and Future," I sketched some of the developments of the Hospital during that period. Since then there have been many changes which should be mentioned at least briefly in any consideration of the traditions of the Hospital. On July 1, 1940, the Hospital was transferred to the jurisdiction of the Federal Security Agency, then recently organized to consolidate the health, welfare, and educational activities of the Government. The Hospital is now a bureau of that Agency. Even though some functions have been taken from us and others added, an attempt has been made to maintain the basic traditions. Many advances have been made in medicine in that period, thanks very largely to World War II. The so-called sulfa group of drugs, penicillin and the rest of the antibiotics, the development of the various drastic therapies, are but a few of the innovations of the past decade. The laws relating to admissions have been changed and somewhat improved. The original mandatory jury trial, long objected to in previous annual reports, was changed in 1938 and modified somewhat in the following year. Since then, at long last, a voluntary admission law has been established (1948) and in the same year provision was made for direct admission from the community.

During the decade the vogue of "sexual psychopath" laws affected the District by the enactment of the so-called Miller Act in 1948, and the Hospital has now received about 60 patients of this type. It is still one of the very few centers where a serious attempt has been made at a program of psychotherapy for this group, under Dr. B. J. Cruvant. Too many psychiatrists, assuming that the so-called psychopathic personality is "constitutional" and therefore untreatable, have taken an extremely pessimistic viewpoint on the treatability of cases of this type, a viewpoint which we do not share, even though in this group as in others patients who are highly resistant to therapy are found.

Foreign Service officers and residents of the Virgin Islands have been added to the groups eligible for care in Saint Elizabeths. Psychodrama as developed by Moreno was introduced into Saint Elizabeths, the first public mental hospital to use it, in 1942, and at about the same time dance, music and art classes were developed. The contributions of these new types of therapy have been most gratifying.

The most significant event of the decade, of course, was World War II. In 1940, recognizing that war might readily develop, the armed forces were being expanded. For a time in 1941 this Hospital was used as an overflow, so to speak, by Walter Reed Hospital. In 1942 a number of Naval medical officers and corpsmen were assigned to the Hospital for training, incidentally giving valuable aid to the Hospital at a time when shortages of personnel were becoming acute. With the stepping up of military activities the Red Cross developed a Gray Lady program, despite the loss by fire of the Red Cross House in February of 1941. The loss of this building was promptly met by the Red Cross with the erection of a splendid new structure, which serves as the recreation center of the Hospital. The training program of the Hospital was expanded, including not only the Navy personnel but Red Cross workers for overseas service and cadet nurses.

The admissions showed a tremendous increase, as was to be expected with the growth of the Navy. On June 30, 1945 there were 7,466 patients on the rolls, the largest number in the history of the Hospital. During the period of the War, indeed, 5,600 Naval patients were cared for. One hundred and twenty-five Naval officers, 40 Navy nurses and 800 corpsmen, as well as a few Waves, were trained. About 3,000 Red Cross workers received some psychiatric orientation during the same period, and the Hospital participated in several confidential studies for the Army and the Public Health Service. The Hospital was given a Certificate of Achievement by the Surgeon General of the Navy and a commendatory letter by the Surgeon General of the Army for the services rendered by it to the war effort. Many of our physicians, nurses, and other employees served in the armed forces. Wherever they went they found others, especially physicians, who had at one time or another served at Saint Elizabeths; with such "alumni" the name "Saint Elizabeths" served as an "open sesame" or password, which indicated a bond of companionship such as is illustrated well at our annual meetings of the Medical Society of Saint Elizabeths Hospital.

In view of the services which the Hospital had rendered and its long history of coöperation with the armed forces, the passage by the Congress (by a close margin) of Reorganization Plans 2 and 3 in 1946 came as an unpleasant shock. The first of these summarily abolished the Board of Visitors, a Board which had given long and honorable service and which had given the public "confidence in the correctness of the management of the hospital," to use the phrase of Dorothea Dix. Plan no. 3 rendered ineligible for care in the Hospital any further patients from the Army or the Navy, thus severing a connection of over 90 years. An interview published in the newspapers quoted the man who was then the Director of the Bureau of the Budget as saying, in effect, that the only reason for recommending this Reorganization Plan was that, in his opinion, the Hospital was "plenty large enough" and should be cut down in size, adding that what the Navy did with its patients was no concern of his!* The connection of the Hospital with the Navy was always a source of great satisfaction and the results which the Hospital obtained in treating Navy patients were always most gratifying not only to the Hospital but to the Navy. We lament the change, and hope that some time in the future the happy relationship which existed for so many years may be reinstituted.

In 1946 a survey of the needs of the Hospital was made by the Public Buildings Administration, and a considerable amount of building has taken place since then. We now have in operation a new laundry and warehouse building as well as a 500-bed Geriatric Building, and plans are nearly completed for a 400-bed admission building. Unfortunately, in spite of the fixed idea of the Bureau of the Budget that the Hospital must grow no larger, patients continue to come to the Hospital and there is a steady growth of the institution, with resulting overcrowding. The funds allowed for personnel have shown a slight but steady proportionate shrinkage, so that actually the ratio of personnel to patients is falling. At the present time the personnel ratio of the Hospital is approximately 25 per cent below the American Psychiatric

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* For a discussion of this example of bureaucratic high-handedness and indifference to patients' welfare, see editorial comment in M. Ann. District of Columbia, 1946, **15**, 498.

AN INVITATION

Dr. R. Lomax Wells, Medical Director of the Chesapeake and Potomac Telephone Company, extends an invitation to interested physicians to visit the Telephone Company's establishment. If a sufficient number of members are interested, a guided tour will be arranged. Physicians are asked to call the Medical Society's Executive Offices, District 3111, and give their names. When ten or more have indicated their interest, arrangements will be made with Dr. Wells and members will be notified the day and time of the tour.

Association standards. This has called for hard work on the part of the staff, and the efforts of the physicians, nurses and attendants are deeply appreciated.

The number of patients on the rolls at present is nearly 7,200; admissions during the last fiscal year (ending June 30, 1951) were 1,412, with discharges of 928, or 65.72 per cent. Significantly, however, the proportion of older patients is increasing steadily, with its implications of poorer prognosis and longer stay. Nearly 30 per cent of our population is now over 60 years of age, and patients in that age group constitute nearly one third of all admissions. The most urgent problem of the mental hospital of today is that of the aged patient.

The training activities of the Hospital have been expanded considerably during the decade. At the present time we have not only nurses—student, affiliate and postgraduate, but occupational therapists, social service workers, clinical psychologists, residents and interns (including a resident in surgery), medical students, and during the past few years a very significant development, pastoral training, both for practicing clergymen and for students in theological schools. The organization of the Chaplain Branch in 1949 has added a potent weapon to the therapeutic armamentarium of the Hospital, and is one of the developments of which we are justly proud. Research activities have been carried on in the Social Service Department, the Psychology Branch, and in the Laboratory, and some clinical studies have been made as well. The lure of private practice and the fact that the Vererans Administration is authorized by law to offer a 25 per cent premium in salary to diplomates of specialty boards have made it increasingly difficult to hold staff physicians above the grade of resident. It is to be hoped that through appropriate changes in the law or in classification some fairer method of competition with other Governmental activities may be brought about.

As for treatment, an attempt is being made, still in line with the traditions of the Hospital, to maintain an eclectic approach. We are much interested in psychotherapy, both individual and group, and a considerable amount of both types is in progress. Various other specialized approaches already mentioned, such as the psychodrama, the art classes, the dance classes, and in addition various types of recreation and occupational therapy are employed. The drastic therapies are being used in moderation, particularly electro-convulsive therapy and the so-called sub-shock insulin. Lobotomy, a mutilating operation at best, is resorted to very sparingly.

If one were to sum up what have been the outstanding traditions of the Hospital during the past century, one should say, first of all, kindness to the patients, a permissive and friendly atmosphere, and an attempt to make the surroundings as comfortable, as pleasant, and attractive as possible. This atmosphere is hard to describe or demonstrate, but it is commented upon by most visitors as one of the striking features of the Hospital. Of equal importance has been the readiness to try anything new in the line of treatment which is consistent with the welfare of the patient, closing our minds to no method which meets these requirements, and making no attempt to regiment the minds of the young physicians with regard to any one school of psychiatric thought. We are proud of our traditions, proud of the many medical alumni of our Hospital and their achievements, and proud of the devoted men and women who have maintained Saint Elizabeths traditions through the years. With a continuance of these traditions and of the financial support by Congress, which has almost uniformly been forthcoming, we may safely hope that Saint Elizabeths will continue to enjoy its high reputation as it starts a new century of psychiatric progress.

MEDICINE IN THE NATION'S CAPITAL*

WALLACE M. YATER, M.D., F.A.C.P.
President, The Medical Society of the District of Columbia

As President of the Medical Society of the District of Columbia I greet you as the right arm of our organization. We doctors look upon your organization as an important adjunct to ours. We want to encourage you to develop a program which will supplement ours. There are many projects you might undertake that we, with our numerous interests, cannot find the time to pursue. Our Society has now over 1,800 members, of which the majority are Active members. It has numerous committees with more than 200 members assigned to them. It is interested in all things of a medical nature, but while our committees are working on many matters, and earnestly too, they cannot encompass the whole realm of things bearing on the health of our people.

The theme of my talk is Medicine in the Nation's Capital, but I want to conclude it with some suggestions regarding projects you might consider undertaking.

You may well be proud of the fact that Washington has grown into a great medical center, not yet complete or at its pinnacle, but rapidly attaining stature with other medical centers. And you can be modestly proud that your husband or relative is contributing to its reputation as such. Indeed, you yourself are contributing by giving moral support to your doctors and doing things of a helpful nature.

We have here a very high grade of medical men and a number of excellent medical institutions. Medical practice is on a very high plane. Medical research of great scope is being carried on. Many articles from our doctors and institutions are published annually over the country, and our men are invited to give lectures in other cities.

In the past few years there has been a great influx of excellently trained physicians, both general practitioners and specialists—men trained in our best institutions. There is now about one doctor for every 700 inhabitants, and there should be no complaint that our people cannot get adequate or, may I say, superb medical care. And the fees are not exorbitant; indeed, I believe that on the whole they are lower than in many large cities.

Our city has done two things to help people meet the high cost of medical care and to combat the threat of socialization of medicine. The first to come was Group Hospitalization, Inc., which helps defray the staggering cost of hospitalization on a voluntary basis. Our Society and, therefore, naturally the medical profession, is well represented on the governing board of this organization by some of our members. The second organization was established by the Society itself to help defray the cost of surgery and obstetrical care. This is Medical Service, which our former President, Frank D. Costenbader, had so great a role in developing, and which is administered by Group Hospitalization. This voluntary insurance plan will no doubt be extended to include catastrophic illnesses of all kinds.

There are still those who advocate compulsory health insurance, but there is a growing sentiment against it. The A.M.A. has done a laudable job in this connection with its Educational Campaign which has just been brought to a close. The A.M.A. is to be congratulated as the chief bulwark against ultra socialism in this country. The hardest thing to convince the people is that doctors are not opposed to compulsory health insurance because it is just a bad thing for doctors but because it is even worse for them. . . . Now the AMA is backing a program of voluntary insurance in which constituent state and county societies participate. These voluntary insurance plans are growing rapidly and, if given time, should eventually be the answer to our problems.

Other problems confront us, however. There is an inadequate supply of doctors, particularly in rural areas. This problem is linked up with the fact that there are too few Class A medical schools and that many of those we have are finding it difficult to pay their bills. The AMA is aware of these things, and here again it wants to keep the Government out of the picture. There have been advocates in Congress for Government subsidies, which we are opposed to because we fear this plan would be the first step in the Government taking over the medical schools. Once more the AMA has come forward with a plan to help meet the deficits of medical schools through voluntary contributions, thus by-passing the Government.

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* This is a condensation of the talk given by President Yater before the Woman's Auxiliary to the Medical Society of the District of Columbia, October 8, 1952.

You ladies no doubt know that the days of big money in medicine are over. Doctors have to work harder than ever to make a good living. Any increase in fees brings forth a tremendous howl from the people. Actually there has been little increase in fees in late years in spite of an inflation of nearly 100 per cent. We have to accept this situation, however, as an important tool in combating the great hue and cry about "the high cost of medical care."

Now, as to some of the things I thought, or at least hoped, you might be interested in helping us with. It is fine to create scholarships for nurses, etc., but I should like to see you tackle bigger things, projects that would be a challenge to you. Here are just a few ideas. In spite of the importance and size of our city, we have no adequate facilities for holding a national medical convention. Our hotel ballrooms are too small, Constitution Hall does not have the smaller meeting rooms for panel and round-table discussions, and the National Guard Armory is too removed from the hotel district, too unattractive and too expensive to rent. What we need is a first-rate civic auditorium that could be used for large conventions and concerts. One is long overdue. Why couldn't we put our weight behind such a project? I believe a good concerted push by a number of organizations would give the impetus needed.

Nobody likes an alcoholic when he is acutely intoxicated. Many people, including physicians, are apt to look upon him as a "bum." Perhaps that does describe him at the time, and, yet, many alcoholics are fundamentally fine people. . . . Alcoholics Anonymous, in my opinion, has done more to help alcoholics than professional therapists. Because of the unruly nature of persons in a state of acute alcoholism hospitals in general refuse to accept them for treatment, and thus many are "slapped" into Gallinger Hospital. One of our crying needs is to convince hospitals that they should provide facilities for taking care of acute alcoholics. The Committee on Alcoholism of the Society is very keen to bring this about, and I believe your organization might give the Committee considerable help in this effort. It will take aggressiveness, perseverance and imagination to do the job.

Along with alcoholics people with emotional disturbances are poorly cared for when they need hospitalization. Outside of about 25 beds at George Washington University Hospital I know of no place in the city itself except Gallinger Hospital where these people may be treated. I am hoping that the proposed 750-bed hospital that will be an amalgamation of Garfield, Emergency and Episcopal Hospitals will have a special section for this purpose. Seventy-five beds are being advocated by the psychiatrists, but it is impossible to say what number will be approved. In my opinion, we need not only a section in all big general hospitals for mentally disturbed patients, but an institute where private patients may be treated for weeks, months, or longer. Emotional disturbances are the commonest of all disorders, and yet our facilities for treating such patients are far less than those for other patients. I believe an attack on this problem is overdue, and I am sure that your organization could help tremendously in getting results. That, again, will take concerted effort.

Few people know all of the splendid organizations and medical institutions in Washington. Even physicians know only a part. Frequently they are at a loss to know where to go for help with special problems of patients. It would be a fine thing if we could prepare and publish a small book giving all of the data on things relating to medicine in the Nation's Capital. It would include facts about each of our hospitals, our medical schools, our societies, our nurses', technicians' and social service organizations, our approved special clinics, approved nursing homes, homes for old and infirm people, remedial schools, our public medical institutions, our Health Department and the health regulations of the District, rehabilitation centers, and a host of other things. It would be on the desk of every physician and in the offices of all organizations and people, of which there are thousands, interested in medical matters. It could be shown with pride to visiting physicians, and it could be used by our Board of Trade to encourage national medical organizations to hold their meetings in Washington. It would mean lots of work and considerable expense, but I believe that, with the proper build-up, we could get various societies and associations to contribute. It would be a worthy project of the Woman's Auxiliary.

Concerning Those Who Work with Us

THE DISPENSING OPTICIAN

C. Martin Brand and Alfred Teunis
Members, Guild of Prescription Opticians of Washington

"Here lies Salvino del Armati, the inventor of spectacles, God forgive him his sins. Died in the year of our Lord, 1317." These words on an ancient tombstone in a Florentine church are Italy's claim to the origination of this modern-day necessity.

There is reason to believe, however, that the ancient Chinese Emperor of about 2282 B.C. used lenses of crystal, quartz, or amethyst to view the stars. Also the art of glassmaking had developed to the point where a tomb of about 200 B.C., recently excavated, produced a pair of spectacles with lenses of approximately plus 2.50 diopters of correction.

The idea of lenses to improve vision, while being very old, did not progress very rapidly. It must be remembered that printing was not invented until 1440, and prior to this very few people could read or had anything to read.

The earliest written matter pertaining to ophthalmic optics was Roger Bacon's Opus Magnus in 1268, setting forth the science of optics in general and lenses in particular. He recommended the use of a plano-convex lens for old, weak-eyed people. As mentioned above, Italy's claim to the invention of spectacles was dated 1285.

The chief purveyors of eyeglasses for the two centuries following the invention of printing were peddlers who traveled throughout the land. It was not until the 17th century in Europe and the 18th in America that optical stores came into existence.

The 17th century found much progress being made. In 1608 Galileo Galilei developed the telescope, and in 1633 the earliest illustrated scientific work on the use of spectacles was written by Daza del Valdes, a Notary of the Inquisitions at Seville, in which he mentions cataract lenses. It was in this century, too, that Newton conducted his famous experiments upon the composition of light and the effect of prisms upon it. The year 1785 found our own Benjamin Franklin inventing the first bifocal lenses made by splitting the distance and near lenses and mounting both before the eye.

The next great step came with the International Scale of Measurement, now universally used in the optic field, known as the Dioptric Scale, based on the metric system, established in 1875.

It is without doubt that the greatest progress has been made in the first half of the current century. Improved diagnostic instruments, improved optical glass for varying needs, and better-trained personnel in all phases of ophthalmic optics have resulted in the finest of visual aids for people in all walks of life.

The stimulus to the advance in the production of optical glass in the United States, both in quantity and quality, was probably World War I. At this time foreign sources of supply were cut off and our glass plants, encouraged and aided by the U. S. Government, started to develop and produce optical glass equal in quality to the best importations. Its composition includes certain chemicals, such as nitrates, carbonates and silica, commonly known as sand. These ingredients are mixed together and melted in clay pots in special furnaces capable of maintaining and accurately controlling very high temperatures. The mixture is carefully stirred in its molten state to eliminate all bubbles, after which it is poured onto a heated flat iron plate to the desired thickness and slowly cooled. The sheet of glass can then be cut into small pieces which in turn are moulded into blanks and annealed to avoid stress and strain. It is from these blanks that the lenses are ground.

This is the point at which your optician enters the picture. He has received the prescription which your ophthalmologist has given you; he has taken your interpupillary distance so that he can have the optical centers of the lenses placed in the correct position before your eyes; he has assisted you in selecting a frame to your liking, and has taken your facial characteristics into consideration in determining the proper size and shape in order that you will derive from your glasses the utmost satisfaction, not only functionally, but also comfortably and cosmetically: and if you are to wear bifocals, he has discussed with you the use to which they are to be put in order to determine the most suitable type and the proper height of the reading segment.

The optician is now prepared to start the fabrication of your glasses. The blanks which have come from the factory are now blocked to a steel disc so that they may be ground and polished to the desired curvatures. Emery is used as the abrasive as the glass is brought in contact with a spinning spherical steel lap, shaped like a dome when the concave surface is to be ground, or dished out when the convex surface is ground. Coarse emery is used first, to grind the lens down to the approximate thickness, after which medium and finally fine emery are used to smooth the surface. The lap is now thoroughly washed to remove all traces of emery, and a polishing pad is cemented on to it. The lens is again brought in contact with the spinning lap and given a high polish as cerium oxide, the polishing agent, is applied to the pad.

After the grinding and polishing operations, the lens is checked for focus. The optical center is now located and if it is a cylindrical lens (i.e., one for the correction of astigmatism), the axis is determined and orientated. The lens is then inserted in an edging machine consisting of a large revolving carborundum wheel, whose circumference comes in contact with the edge of the turning lens. This machine edges the lens to its final size and shape. After this process the edges of the lenses are beveled and inserted in the frame. The optical technician in doing this must be careful to see that they are inserted at the proper axis and that they are tight in the frame. Most opticians now use glass beads to assist them in this operation. The plastic frame is immersed, one rim at a time, into these beads heated in a pan about 3 inches deep. These beads impart an even heat to the frame, making it temporarily pliable, so that the lenses may easily be inserted. When the frame again cools, the rims contract and thus hold the lenses securely in place.

Now that the glasses are completed, the final operation is a careful inspection to make sure that they correspond exactly to the prescription, as the ophthalmologist has written it. As the optician now fits the glasses to the patient, there are several things he should take into consideration. The guards (nose pads) should be adjusted so that the glasses are at the correct height, that is, centered directly in front of the patient's eyes. It is particularly important that bifocals be placed in position so that they are high enough for comfortable near use, but not too high to interfere with distant vision. The temples should be made comfortable by bending them to conform to the curvature of the ears, or head behind the ears, depending upon the type of temple which has been selected. The glasses should be angled in at the bottom about 10°. In the case of cataract lenses it is necessary for the frame to be adjusted so that the distance from the lens to the cornea is as noted on the doctor's prescription.

The finished optician has a working knowledge of every phase in the fabrication of your glasses. He has served his apprenticeship by performing each operation until he has become proficient in it. Most opticians have spent several years working in the laboratory prior to their taking in prescriptions and fitting glasses.

"The Gods visit the sins of the fathers upon the children." Even today we occasionally hear people remark, "It's a sin that we have to wear glasses." They seem to overlook the tremendous strides that have been made by that purveyor of good vision—your optician.

WOMAN'S AUXILIARY NOTES

The President of the Woman's Auxiliary to the Medical Society of the District of Columbia, Mrs. Ernest E. Hadley, presided at the October meeting. At the conclusion of committee reports and discussion, Dr. Wallace M. Yater, President of the Medical Society of the District of Columbia, was introduced. The subject of Dr. Yater's talk was "Medicine in the Nation's Capital." He emphasized the excellent medical, surgical and obstetrical care which is available to residents of the District, stressing particularly that fees are not exorbitant but are lower than in many large cities in spite of more than 100 per cent inflation. A condensation of Dr. Yater's speech appears in this month's issue of MEDICAL ANNALS.

The speaker for the November meeting of the Woman's Auxiliary will be Dr. Cyrus H. Maxwell, Assistant Director of the Washington Office of the American Medical Association. His talk will be entitled, "What is the A.M.A.?" Some of the topics

Dr. Maxwell will touch upon are legislative problems of today, your Medical Society, doctors' draft, and subsidization of our medical schools.

The Annual Tea of the Woman's Auxiliary will be held following the business meeting in December. This is usually a festive affair with many distinguished guests of honor. Members who are unable to attend regular business meetings usually make a special effort to attend this social event.

The Woman's Auxiliary is honored in having Mrs. Edgar Quayle, Past President of the Woman's Auxiliary (1948), as Chairman of the national Legislative Committee of the Woman's Auxiliary to the American Medical Association. The Legislative Committee is one of the most important committees in the national organization and Mrs. Quayle is serving her third year as chairman. She will attend a meeting in Chicago on November 6 and 7 and will conduct a panel on legislative problems.

MRS. LEO C. VARDEN
Publicity Chairman

MEMBERSHIP

The following applicants for membership were duly elected to membership at the meeting of the Executive Board, July 28, 1952, in accord with Amendment XI, Section 2, of the Constitution and By-laws of the Society.

Active Members

Christopher T. Bever, 1613 Longfellow Street, N.W.
Marcus P. Goumas, 4215 South Four-mile Run Drive, Arlington, Va.
Albert M. Jenkins, Jr., 1835 Eye Street, N.W.
Gordon W. Kelley, 14 Q Ridge Road, Greenbelt, Md.
William F. Kellow, 227 5th Medical Square, Beale Air Force Base, Calif.
Walter E. McCawley, 1449 South Carolina Avenue, S.E.
Mor James McCarthy, 3765 Northampton Street, N.W.
Ann T. Swing, American Embassy, Paris

Associate Members

Norman McCullough, National Institutes of Health, Bethesda Md.
William Robert Stecher, Prince Georges General Hospital, Cheverly, Md.

The following applicants for membership were duly elected to membership at the meeting of the Executive Board, September 22, 1952.

Active Members

Reginald G. James, 601 48th Street, N.E.
C. Herbert Marshall, Jr., 2712 P Street, N.W.
Edward C. Mazique, 1114 W Street, N.W.
John Sinclair Perry, 302 Virginia Avenue, S.E.
Arthur H. Simmons, 1223 Quincy Street, N.W.

The following applicants for membership will be voted on at the meeting of the Executive Board, November 3, 1952.

For Active Membership

Charles E. Bickham, Jr., Jefferson Medical College—1946
Edward J. Carry, Georgetown University—1945
Beatrice di Marco, New York Medical College—1943
William H. Cooper, George Washington University—1949
David Eden, New York University—1943
Max J. Fischer, Georgetown University—1946
Thomas P. Fogarty, George Washington University—1948
Bela Gondos, P. Pazmany University (Budapest, Hungary)—1926
Michael M. Healy, Georgetown University—1945
R. Frank Jones, Howard University—1922
John W. Lawlah, Rush Medical College—1931
Thomas F. McDermott, Columbia University—1939
Robert L. Regan, Georgetown University—1947
Maryjo Roth, Ohio State University—1948
Bina Roth, University of Vienna (Austria)—1934
Roland B. Scott, Howard University—1934
Thomas W. Stewart, Columbia University—1945
Henry W. Stout, George Washington University—1949
Gloria W. Troendle, Washington University—1950
Charles R. Webb, Georgetown University—1946
Thomas M. Wilson, George Washington University—1945

For Associate Membership

William D. Dolan, Georgetown University—1942
Charles Farwell, Tulane University—1949
James Blaine Fitzgerald, Georgetown University—1948
Douglas J. Giorgio, New York Medical College—1937
Leanhard J. Hantsoo, University of Tartu (Estonia)—1931
Fuad I. Kaibni, American University of Beirut (Lebanon)—1947
Walter A. Leas, Ohio State University—1921
John P. Lindsay, Vanderbilt University—1950
William B. Ober, Boston University—1946
Helen K. O'Brien, Boston University—1948
Joseph W. Pidgeon, George Washington University—1951
John S. Rogers, Rush Medical College—1941
Francis J. Troendle, Georgetown University—1948
John C. K. Yu, St. John's University (Shanghai, China)—1949

For Resident-Intern Membership

Jorge B. Morales-Rodas, Loyola University—1950

News and Personals

The Sixth Annual Clinical Session of the American Medical Association will convene in Denver, Colorado, December 2 to 5. Featured will be practical demonstrations on various phases of medicine of special educational value to the general practitioner. More than 60 scientific exhibits will provide the G.P. with a postgraduate course in such subjects as office anesthesia, cardiology, dermatology, endocrinology, gynecology, laboratory procedures, otolaryngology, pediatrics and proctology. All scientific sessions, technical and scientific exhibits will be held in Denver's Municipal Auditorium.

The Board of Trustees will announce the General Practitioner of the Year from a list of nominees selected by county and state medical societies from all parts of the country.

The House of Delegates will meet in conjunction with the Clinical Session. Attending these sessions from the District Medical Society will be Drs. Herbert P. Ramsey and Hugh H. Hussey, Delegates, and Theodore Wiprud, Secretary.

Doctors planning to attend the Clinical Session should make reservations as soon as possible. Application forms for hotel reservations and for advance registrations will be found each week in the *Journal of the AMA*. There is no registration fee for members.

The Eighth International Medical Cruise Congress of the Pan American Medical Association will sail from New York on the S.S. *Nieuw Amsterdam* of the Holland-American line, January 7, 1953. The scientific sessions of the Congress will be held each morning while the ship is at sea. The papers to be read before the General Assembly will embrace all branches of medicine and surgery. There will also be panel discussions on special subjects of widespread interest. Those interested in giving a scientific address before the Congress should submit the title and an abstract of 50 words for presentation to the Program Committee. The ship will return to New York, January 19. Complete information regarding this meeting may be obtained by writing to the Association at its Executive Offices, 745 Fifth Avenue, New York 22, N. Y.

The American Academy of Obstetrics and Gynecology will hold its first Clinical Session, December 15–17, at the Palmer House, Chicago. The meeting will feature 6 general sessions and 48 discussion groups of 40 Fellows each. Dr. Carl P. Huber, of Indianapolis, the retiring President, will address the banquet on Tuesday evening, December 16. Program information may be obtained by writing to Dr. Ralph A. Reis, Secretary of the Academy, 116 South Michigan Avenue, Chicago 3, Illinois.

The 54th Annual Meeting of the American Therapeutic Society will be held in New York City, May 28–31, 1953, at the Biltmore Hotel, prior to the AMA Convention. Dr. Oscar B. Hunter, Jr., Secretary of the Society, urges members to write to the Hotel immediately for individual reservations, being sure to mention that they are attending the meetings of the Therapeutic Society. The Program Committee also asks members who wish to present papers to submit the title and a 200-word abstract to Secretary Hunter, 915 19th Street, N. W., Washington, D. C., as soon as possible.

The second course for the fiscal year 1953 in **Medical Aspects of Special Weapons and Radioactive Isotopes** will be held at the U. S. Naval Medical School in Bethesda, Md., November 17–22, 1952.

The course will present problems likely to be confronted and technics to be employed by medical and dental officers in the field of radiological activity which are not available to officers in their civilian capacity. It is conducted primarily for the benefit of inactive Reserve Medical, Dental, Medical Service, Nurse, and Hospital Corps officers, who should submit their request for six days' training duty to their respective District Commandant at the earliest practicable date. The Navy stresses that acceptance of orders to attend these courses will not in any way increase the possibility of call on extended active duty of the personnel concerned. Inactive Reserve Medical Department personnel are encouraged to take advantage of this opportunity to attend this training course on active duty orders in a pay status.

The Washington Academy of Surgery will hold its next dinner meeting at the Kennedy-Warren, December 8, at 6:30 p.m. Dr. Nathan A. Womack, Professor of Surgery, University of North Carolina, will be present to speak on "Diseases of the Biliary Tract."

The first fall meeting of the Academy was held at the Kennedy-Warren, October 13. Dr. Charles W. Mayo, Professor of Surgery, Rochester, Minn., was the guest speaker. Present to hear his talk on "Diverticulosis and Diverticulitis of the Colon" were 212 members and guests. Dr. J. Ogle Warfield, President of the Academy, presided at the meeting.

The Washington Psychiatric Society and the Washington Psychoanalytic Society will hold a joint meeting on November 15. The principal address will be given by Dr. Gregory Zilboorg, Consultant in Psychotherapy, Butler Hospital, Providence, R. I. Following presentation of his paper, discussion will be led by the Reverend Gustave Weigel, S.J., Woodstock, Md., the Reverend A. T. Mollegen, Virginia Theological Seminary, Alexandria, Va., and Dr. Douglas Noble, Washington.

On December 17 the guest speaker will be Harry J. Anslinger, Commissioner of Narcotics, U. S. Treasury Department. He will speak on "Control of the Narcotic Addict." Discussion following the paper will be led by Dr. K. W. Chapman, Officer in Charge, USPHS Hospital, Lexington, Ky.

The first meeting of the Society was held on October 15. Dr. Paul Hoch, Principal Research Psychiatrist, New York State Psychiatric Institute, spoke on "Psychodynamics of Drug States in Schizophrenia." Discussants of his paper were Dr. Solomon Katzenelbogen, Director of Laboratories, St. Elizabeths Hospital, and Dr. Seymour Kety, Associate Director, National Institute of Neurological Diseases and Blindness.

All meetings of the Society are held in the Medical Society's auditorium at 8:30 p.m.

The International Academy of Proctology announces its **Annual Cash Prize Award Contest** for 1952–53. The best unpublished contribution on proctology or allied subjects will be awarded $100 and a Certificate of Merit. Certificates will be awarded also to physicians whose entries are deemed of unusual merit.

This competition is open to all physicians in all countries, whether or not affiliated with the Academy. The Academy reserves the exclusive right to publish all contributions in its official publication, *The American Journal of Proctology and Gastroenterology.*

All entries must be received no later than the first day of April, 1953. They are limited to 5,000 words, must be typewritten in English, and submitted in 5 copies to the International Academy of Proctology, 43–55 Kissena Blvd., Flushing 55, New York.

The American Diabetes Association offers a $250 **prize award** to interns and medical students for a paper on any subject relating to diabetes. The paper can be a report of original studies, a biographical or historical note, a case report with suitable comment, or a review of the literature.

Manuscripts must be submitted on or before April 1, 1953 to the Editorial Offices of *Diabetes: The Journal of the American Diabetes Association*, 11 West 42nd Street, New York 36, N. Y. The papers will be reviewed by the Editorial Board, which will take into consideration the value of the material and method of presentation in selecting the best paper.

The award of $250 has been made possible through the generosity of the St. Louis Diabetes Association, an Affiliate of the A.D.A.

The Division of Medical Sciences, National Research Council, announces that December 10 is the deadline for receipt of applications for **postdoctoral research fellowships** beginning in 1953. Sponsors of awards include Rockefeller Foundation, Lilly Research Laboratories, National Tuberculosis Association, and James Picker Foundation. Details and application blanks are obtainable from the Fellow-

CALENDAR OF MEETINGS, SEPTEMBER 16—OCTOBER 15

September 18	Area Chairmen, Doctors Group, Community Chest Campaign
September 19	Graduate Nurses' Association
September 22	Executive Board
	Committee on Insurance
	Committee on Public Health
	Subcommittee on Mental Health
September 23	Subcommittee on Alcoholism
September 24	Health Section, United Community Services
October 2	Health Section, United Community Services
October 3	Sports Committee
October 6	Subcommittee on Arbitration (Industrial Medicine)
October 7	Grievance Committee
	Registered X-ray Technicians of Washington
October 8	Woman's Auxiliary
October 9	Section on Neurology and Psychiatry
October 10	Committee on Medical Care
	Washington Psychoanalytic Society
October 11	Washington Psychoanalytic Society
October 13	Technical Assembly of Orthopedic and Prosthetic Appliance Profession
October 14	Membership Luncheon
	Medical Officers' Reserve Units
October 15	Subcommittee on Mental Health
	Subcommittee on Maternal Welfare
	Washington Psychiatric Society
	Women's Medical Society

ship Office, National Research Council, 2101 Constitution Avenue, N.W., Washington, D. C.

The weekly **Medical Grand Rounds** of the Department of Medicine of the **Georgetown University Medical Center** for the 1952–53 session commenced on September 16, in Amphitheatre 102 in the Medical School Building. Rounds centered about the presentation of patients with problems in gastrointestinal bleeding. Lt. Colonel Eddie D. Palmer, Chief of the Gastrointestinal Section, Walter Reed Army Hospital, was the guest discussor for this session.

Medical Grand Rounds are conducted on an informal basis with many members of the Department and guests participating. Whenever possible the Rounds will center about the presentation of patients as the subject of discussion. Interested physicians are cordially invited to attend.

The Washington Psychiatric Society is sponsoring an **essay contest** for physicians in psychiatric residency training in the Washington Metropolitan Area. First prize will be a cash award of $100 for the best paper submitted. Certificates of merit will also be awarded. The paper must not exceed 6,000 words in length and may be on any subject in psychiatry or a closely related field. The deadline is February 1, 1953. Dr. Seymour J. Rosenberg, Secretary of the Society, will be glad to furnish any further information regarding the contest. Winners of the awards will be invited to present their papers before the Society.

The United States Employment Service for the District of Columbia advises that **three medical positions** are open in a public institution for mental defectives in the Washington, D. C. area. The three positions are:

1. Superintendent, who must be a psychiatrist and an administrator. Salary, $9,600 to a maximum of $10,600. House, completely furnished, is included together with commissary privileges.

2. Assistant Superintendent, open to psychiatrist or one eligible for the Psychiatric Boards. However, any other physician with ability in personnel and public relations will be considered. Salary, $8,360 to a maximum of $9,360. Furnished apartment at $25 per month provided and commissary privileges.

3. Staff Physician. Salary, $7,040 to a maximum of $8,040. Furnished apartment at $25 per month provided and commissary privileges.

The institution has a capacity of 750 persons and an authorized staff of 251. The annual budget is approximately $1,000,000 per year.

Physicians interested in applying for these positions should send a brochure or letter listing their qualifications to Mr. K. N. Fox, Manager, U. S. Employment Service for the District of Columbia, Clerical and Professional Office, 315 12th Street, N.W., Washington 25, D. C.

The U. S. Civil Service Commission has announced a **Medical Officer examination** for filling the positions of Rotating Intern, Psychiatric Resident, and General Practice Resident in St. Elizabeths Hospital. The Rotating Intern positions pay $2,800 a year, Psychiatric Resident, $3,400 to $4,200, and General Practice Resident, $3,400 to $3,800 a year. Education and training requirements must be met. No written test will be given. The maximum age limit is 35 years (waived for veterans).

Full information and application forms are available at most first- and second-class post offices, and at the U. S. Civil Service Commission, Washington 25, D. C. Applications will be accepted until further notice by the Executive Secretary, Board of U. S. Civil Service Examiners, St. Elizabeths Hospital, Washington 25, D. C.

A competitive examination for appointment of Medical Officers to the Regular Corps of the United States Public Health Service will be held on January 6, 7, and 8, 1953. Examinations will be held at a number of points throughout the United States, located as centrally as possible in relation to the homes of candidates. Application forms and detailed information may be obtained by writing to the Chief, Division of Commissioned Officers, Public Health Service, Federal Security Agency, Washington 25, D. C. Completed application forms must be received in the Division of Commissioned Officers no later than November 25, 1952.

The Erie County (Pennsylvania) Medical Society has had a **bowling league** in continuous existence since 1932. Dr. John F. Hartman feels sure that his society has the oldest and best medical bowling league in the country. To back up his contention, he wants to arrange some intersectional bowling matches with other medical society bowling leagues. His address is 724 Sassafras Street, Erie, Pa.

The American Pharmaceutical Association marked its 100th anniversary by holding a Founders Day Meeting at the Hotel Statler, October 7. Mr. R. Q. Richards, President of the Association, gave the introductory greetings. Rear Admiral Lamont Pugh, Surgeon General of the Navy, was present and spoke on "National Defense and the Health Professions." Two other addresses were made, one by Dr. Theodore G. Klumpp, President of Winthrop-Stearns, Inc., on "Private Industry and the Professions Can Meet the Challenge," and the other by Dr. Robert P. Fischelis, Secretary and General Manager of the Association, on "The American Pharmaceutical Association; Its Place and Program in the Healing Arts."

The District of Columbia Pharmaceutical Association celebrated its centennial anniversary the same week. A reception for members of the Association and guests was held on October 10 at the Hotel Statler. Fourteen oil paintings, depicting the history of the pharmaceutical profession, were shown. The paintings were the first in a series of 30 on pharmacy by Robert A. Thom, Detroit artist, who has been commissioned by Parke, Davis and Company to make a pictorial record over a 5-year period, portraying the history of pharmacy from the earliest known record of an apothecary of Babylon. Many members of the District Medical Society accepted the invitation to attend the reception and showing of the paintings.

The Executive Board of the Medical Society of the District of Columbia held its regular meeting, September 22. The following new appointees to various committees submitted by President Yater were approved by the Board:

Committee on Cancer Control: Drs. Theodore J. Abernethy, Joseph F. Belair, C. Willard Camalier, Jr., William K. Billingsley and Paul Kiernan.

Subcommittee on Alcoholism: Dr. Edward M. Pickford, *ex officio.*

Subcommittee on Diabetes: Drs. Edward W. Nicklas and Samuel A. Hillman.

The Board received two resignations: Dr. Edgar W. Davis, from the Subcommittee on Diseases of the Chest, and Dr. Joseph A. Bailey from the Committee on Public Health and the Committee on Coöperation with the District of Columbia Bar Association.

The Board voted approval of a Joint Board of Physical Evaluation suggested by the Public Health Service. The following special committee was appointed by President Yater to study the proposals of the Board: Dr. William P. Herbst, Chairman; Drs. Stuart O. Foster, Henry A. Grennan, and Wallace M. Yater, representing the District Medical Society. Dr. W. P. Dearing, Acting Surgeon General of USPHS, appointed the following physicians to serve with the Society's representatives: Assistant Surgeon G. Halsey Hunt, Associate Chief, Bureau of Medical Services; Medical Director James R. Shaw, Chief, Division of Hospitals; and Medical Director Clifton K. Himmelsbach, Medical Officer in Charge, USPHS Outpatient Clinic.

A joint committee of the Medical Society and Medical Service was set up with the responsibility of investigating and proposing remedies for the problem of postoperative charges to subscribers of the Service. The physicians selected were Drs. Herbert S. Gates, Jonathan M. Williams and Crenshaw D. Briggs.

The Board voted to support Diabetes Detection Drive, November 16–22.

The Twelfth Annual Physicians' Golf Tournament was held at Congressional Country Club on Thursday, October 16, 1952. Eighty-five members and their guests took advantage of the Indian summer day and participated in the annual golf event sponsored by the Society's Sports Committee.

Winners of the main events turned in the following scores for the single round of play: William J. Evans, low gross 74; Sherman A. Thomas, low net 66; Blaine Eig, blind bogey 89; and Thorval L. Hickman, high score 122. Runners-up were: James B. Fitzgerald, second low gross 75; Edgar E. Quayle, second low net 67.

Sixty members attended the steak dinner which concluded the day's activities. Through the successful efforts of the members of the Sports Committee a harvest of prizes was on display and distributed to the winners of the main events as well as to each dinner guest.

Prizes for the tournament were donated by the following firms:

A. S. Aloe Company; Arcum Pharmaceuticals, Inc.; Ayerst, McKenna & Harrison, Ltd.; Beth-Mont Surgical Supply; Beuchler's; Camel Cigarettes; Capitol Cadillac-Oldsmobile Company; Edward K. Cook Company; Corwin's Prescription Pharmacists; Eastern Airlines; Edmonds Optical Company; The Fairway Sporting Goods Shop; Julius Garfinckel and Company; Giant Food Stores; Hall and Sothoron; Joseph R. Harrison; Charles C. Haskell & Co., Inc.; Higger's Drug Store; Hill Johnson, Inc.; S. H. Hines Funeral Home; Bruce Hunt, Inc.; Martin W. Hysong Company; Kloman Instrument Company; Lee Funeral Home; Maxwell and Tennyson; Mayflower Optical Company; Mead Johnson and Company; Medical Center Opticians; Philip Morris Cigarettes; The National Metropolitan Bank; Oakland Terrace Pharmacy; Parke, Davis and Company; Peoples Drug Stores, Inc.; Picker X-Ray Corp.; Franz Richie Company; Schering Corporation; Service Pharmacy; Shepard Park Pharmacy; E. R. Squibb and Sons; Frank R. Strunk; Teunis Opticians; Tipton and Myers Druggists; Westinghouse Electric Company; Whittlesey's Drug Store; John A. Wood Company; Woodley-Rexall Drugs; Tom Wright; and Wyeth, Inc.

Members of the Society's Sports Committee who made arrangements for the tournament were:

Dr. George R. Huffman, Chairman; Drs. E. Raymond Fenton, Clayton Hawfield, Vincent B. Hungerford, Russel Jon Jansen, James P. Kane, Harvey F. Kreuzburg, William F. Luckett, C. R. Naples, Julius S. Neviaser, George K. Nutting, Millard F. Ottman, William R. Perkins, Jr., Edgar E. Quayle, Sanford J. Randall, Sherman A. Thomas, Paul E. Zehfuss, and Samuel Zola.

The George Washington University School of Medicine opened on September 15 with a total enrollment of 358, of which 100 comprised the freshman class, the largest class to enter the School of Medicine. Dr. Walter A. Bloedorn, Dean of the School of Medicine, welcomed the students and distinguished guests at special ceremonies on the opening day. The principal address was made by Rear Admiral Bertram Groesbeck, Commanding Officer of the National Naval Medical Center, who spoke on "Medicine and Aviation." Distinguished officials from various branches of the armed forces, the Veterans Administration, and other Governmental and private medical services attended the opening meeting and were guests of Dr. Bloedorn for luncheon in the Chinese Room of the Mayflower Hotel.

GP, the official publication of the American Academy of General Practice, has been cited by the American Institute of Graphic Arts for its excellence in graphic presentation. The awards made annually to outstanding magazines by the Institute were made public at the opening of an exhibition of the honored publications, October 14, in the Main Gallery of the Artists Equity Building in New York City. Selection of winners was made from leading magazines in the Nation, including many medical journals.

Dr. Hugh H. Hussey, Medical Editor of *GP*, is a member of the Editorial Board of MEDICAL ANNALS.

His two Associate Editors, Dr. Sol Katz and William S. McCune, are members of the District Medical Society.

Dr. Elmer L. Henderson, Chairman of the AMA Coördinating Committee, created in January, 1949, to supervise the AMA's Nationwide campaign of public education against compulsory health insurance, resigned his chairmanship so he could be free to participate in the Presidential election campaign. Whitaker & Baxter, Chicago public relations counselors, who have served as managing directors of the campaign since its inception, also asked to be released from their public relations assignment for the same reason. The resignations were made public on September 22, 1952.

The first fall meeting of the **George Washington University Medical Society** was held on October 15 at 1335 H Street, N.W. A paper on "Rehabilitation of the Cardiac Patient" was presented by the guest speaker, Dr. Jerome G. Kaufman, Assistant Professor of Medicine, Newark Medical College. Dr. Kaufman is also President of the New Jersey Heart Association and Chief of Medicine of the Newark City Hospital.

The Washington Medical and Surgical Society met, October 27, at Hotel 2400. Dr. George Trible, Past President of the Society, gave an address on "One Man's Opinion."

The Washington Society of Pathologists held its regular meeting on October 8 at the Army Medical Service Graduate School. Dr. W. D. Dolan, Arlington Hospital, presented some interesting cases. Colonel J. J. Bernier, D. C., USA, of the Armed Forces Institute of Pathology, described some unusual odontogenic tumors. A paper on "Autopsy Studies on Animals from the Washington Zoo" was read by Dr. W. H. Eyestone, National Institutes of Health.

Dr. James A. Shannon was appointed Associate Director of the National Institutes of Health, Public Health Service, succeeding Dr. Norman H. Topping, who was appointed Vice President in charge of medical affairs at the University of Pennsylvania, effective November 1. For the past 3½ years Dr. Shannon has served as Associate Director of the National Heart Institute, a major research unit within the National Institutes of Health.

Dr. Shannon is widely recognized for his original research in kidney function, chemotherapy, and malaria. He has served as guest investigator at the Physiological Laboratory, University of Cambridge, England, and is a member of the staff of the Marine Biological Laboratory at Woods Hole, Mass. During World War II he played a prominent role in malaria research activities of the National Research Council, and was a consultant on tropical diseases to the Secretary of War.

Dr. Shannon received his M.D. degree from New York University in 1929 and his Ph.D. degree from the same University in 1935. Before coming to the National Heart Institute in 1949, Dr. Shannon served for three years as Director of the Squibb Institute for Medical Research, New Brunswick, New Jersey.

The Capital City School of Nursing of Gallinger Municipal Hospital celebrated its 75th anniversary, October 11, with 350 graduates on hand for a homecoming luncheon and silver tea.

A total of 1,035 nurses have graduated from the School since it was founded as the Washington Training School for Nurses in 1877. It was reorganized in 1904. The tea benefited the Catherine E. Moran Memorial Library, which was named for the Superintendent of Nurses who served the School from 1922 to 1945. The present Director is Miss Beatrice Ritter, who succeeded Miss Moran in 1945. The present student enrollment is 75.

Dr. Sara E. Branham, senior bacteriologist at National Institutes of Health, received the Distinguished Service Citation of the University of Chicago's Medical Alumni Association, October 3. Dr. Branham is an Associate member of the District Medical Society.

Other Washington area physicians also received distinguished service certificates. They were Dr. Joseph L. Johnson, Dean of Howard University School of Medicine; Dr. Charles L. Dunham, Chief of Medical Division of Biology and Medicine of the U. S. Atomic Energy Commission; and Dr. Francis B. Gordon, of the Chemical Corps Biological Laboratories, Camp Detrick, Md.

In a Symposium on Progress of Medical Science, marking the 25th anniversary of the University's

Clinical Department, **Surgeon General Leonard A. Scheele**, USPHS, spoke on "Clinical Investigation in the Field of Public Health," stressing that chronic diseases and mental illness present the greatest challenges to medicine. On October 8 Dr. Scheele addressed Founders Day ceremonies at the University of Southern California.

Dr. Leonard T. Peterson will be one of two representatives of the American Academy of Orthopaedic Surgeons to a joint commission which will undertake an exhaustive study of surgical materials. The commission grew out of an idea advanced by Dr. Joseph S. Barr, Boston, in his Presidential Address before the Academy in Chicago last January. He contended that the success or failure of the surgical procedure is determined in part by the physical and biological properties of the materials used and proposed that all surgical materials used within the human body should be adequately tested by modern methods, and the data made available to all surgeons.

The joint commission will be made up of representatives of the Academy, the American Medical Association, the American College of Surgeons, and the American Surgical Trade Association.

The AMA representatives are Dr. Ralph E. DeForest, Chicago, Secretary of the Council on Physical Medicine and Rehabilitation; Dr. John H. Grindlay, Rochester, Minn.; and Dr. I. Mims Gage, New Orleans. The College of Surgeons will be represented by Dr. Edwin Cave, Boston; Dr. Frank Mayfield, Cincinnati; and Dr. Harrison McLaughlin, New York. In addition to Dr. Peterson, the Academy will be represented by Dr. Hugh Smith, Memphis. The Surgical Trade Association has not yet selected its representatives.

A number of Washington physicians were in New York City, September 22 to 26, attending the **38th Annual Clinical Congress of the American College of Surgeons** at the Waldorf-Astoria. Many members of the District Medical Society participated in the program.

Dr. Brian B. Blades, Professor of Surgery, George Washington University School of Medicine, presented a paper on "Cancer of the Lung" at an evening session, September 23.

Drs. John J. Gallagher, Charles A. Hufnagel, R. W. Moran, John L. Parks and Leonard T. Peterson were among the participants in the postgraduate courses. In the course on Trauma of the Central Nervous System, Dr. Gallagher discussed "Intercranial Hematomas—Extradural and Subdural." In the course on Cardiovascular Surgery, Dr. Hufnagel spoke on "Blood Vessel Grafts." In the same course Dr. Moran was co-author with Drs. Neumann and Lord of New York City on "The Pedicle Flap Pathway" which related directly to the topic, Revascularization of the Myocardium. Dr. John L. Parks was moderator for a discussion of Reduction of Prenatal Mortality. Dr. Peterson collaborated in a discussion on Fractures in the Knee Region.

A Forum on Fundamental Surgical Problems was held in conjunction with the Clinical Congress. Under the chairmanship of Dr. Owen H. Wangensteen, Professor of Surgery at the University of Minnesota, this Forum is a feature of the Annual Clinical Congress. Dr. Paul C. Kiernan, of Georgetown University School of Medicine, submitted a paper on "Metabolic Intake-Excretion Study Following Subtotal Gastrectomy Invalidism." Colonel Dwight Kuhns, an Associate member of the Medical Society, was co-author with other staff members of Walter Reed Army Medical Center and Brooke Army Medical Center, Fort Sam Houston, of a paper on "Staphylococcus Aureus Simultaneously Resistant to Penicillin and Broad Spectrum Antibiotics."

The Medical Society was represented in the Scientific Exhibit by Dr. Milton C. Cobey, of Georgetown University School of Medicine. His exhibit carried the title, "Waterproof Plaster of Paris," and demonstrated the use of Melmac powder in water for soaking plaster of paris bandages.

Dr. Cobey presented a paper dealing with this new material before the 20th Century Orthopaedic Association meeting in Toronto, Canada.

Dr. William R. Stovall, Chief of the Medical Division of the Civil Aeronautics Administration, attended the meetings of the Aero Medical Association in Paris, September 26–28. Dr. Stovall, who is President of the Association, presided over the three-day meeting, the first Interim Meeting outside the United States. He gave an address on "Aviation Medicine as a Specialty."

Dr. Stovall has been with the CAA for 15 years. He has aided in the development of aviation medicine and the design of aircraft from a medical standpoint. He is President of the District Chapter of the American Academy of General Practice.

Dr. Emil J. C. Hildenbrand attended the 30th Annual Scientific and Clinical Session of the American Congress of Physical Medicine at the Roosevelt Hotel, New York, in August. On August 29 he discussed one of the papers presented at this meeting, "The Effects of Physical Modalities on Saphenous Circulation Time with Use of a Radioactive Tracer."

Dr. Harold Jeghers, Professor of Medicine, Georgetown University School of Medicine, gave a lecture entitled, "Building a Personal Medical Library" at the Veterans Administration Hospital in Boston, August 21. He presented the same subject at Boston City Hospital on August 25. Dr. Jeghers also conducted an amphitheatre clinic on herpes zoster for the house staff of Boston City Hospital on August 22.

Dr. Murray M. Copeland, Professor of Oncology, Georgetown University School of Medicine, fulfilled the following speaking engagements during August, September and October:

August 6: "Radiophosphorus, Iodine and Others." This lecture was delivered during a course in the Medical Aspects of Special Weapons and Radioactive Isotopes for U. S. Naval Reserve Medical and Dental Officers at the U. S. Naval Medical School

August 21: "Intrathoracic Neoplasms," to the Indoctrination Class of the Divisions of Chronic Diseases and Tuberculosis, USPHS

September 16: "Differential Diagnosis and Treatment: Premalignant Lesions of Breast," before the Frederick County Medical Society, Frederick, Md.

October 14: "Certain Aspects of Cancer Nursing," before the Georgetown University Nursing Alumnae

October 20: "The Place of the Medical School Coördinator in the Cancer Control Program," before the American Public Health Association in Cleveland, Ohio

October 22: "Musculoskeletal System," during a Seminar on Pathology of Ionizing Radiation Injury for a group of military and civilian pathologists.

After attending the meetings of the American College of Surgeons in New York, Dr. Copeland left for Boston to attend the meeting of the Coördinators of Cancer Teaching. He is chairman of the program committee for the current year.

Dr. Henry P. Laughlin addressed the Maryland Psychiatric Society in Baltimore, October 9. The subject of his address was "King David's Anger."

Dr. Eugene J. McDonald addressed the American Roentgen Ray Society during its meeting at the Hotel Shamrock in Houston, Texas, September 23–26. He spoke on "Evaluation of Placentography in Late Bleeding of Pregnancy" as part of an instructional course of the Society.

Dr. J. Winthrop Peabody was a guest of the Wisconsin Chapter of the American College of Chest Physicians at its meeting in Milwaukee, October 5, just preceding the Annual Meeting of the State Medical Society of Wisconsin.

Dr. Peabody returned to Chicago to participate in the annual postgraduate course in diseases of the chest presented by the College in Chicago, October 6 to 10. He reported a very interesting course with 68 matriculants.

Several members of the District Medical Society participated in the **27th Congress of Anesthetists** at Virginia Beach, Va., September 22–25. Contributions by these members were:

"Infant Mortality Conference: An Interdepartmental Approach to the Study of Infant Mortality," Dr. Arch S. Russell and Dr. Caroline Jackson, both of Garfield Memorial Hospital.

"Intravenous Anesthesia in Dental Surgery," Dr. John Andrina and Dr. Harold Krogh, Doctors Hospital.

"Recovery Rooms in the Care of Surgical Patients," Dr. Donald Stubbs, Doctors Hospital and George Washington University School of Medicine.

Dr. Joseph B. Bogan, Honorary Vice President of the International Anesthesia Research Society, presided at the afternoon session, September 23.

Dr. Donald Stubbs participated in a Symposium on Planned Hypotension at the meeting of the Neurosurgical Society of America in Sea Island, Ga., September 18.

Dr. W. Calhoun Stirling entertained a group of Washington and Baltimore urologists on September 28 in honor of Mr. Galbraith, President, and Mr. Badenoch, Secretary, of the British Association of Urological Surgeons. These two surgeons, with six other distinguished British urologists, visited various medical centers in the United States and were taken on a sight-seeing trip of Washington by Dr. Stirling.

Dr. Leonard T. Peterson was Chairman of a Symposium on Braces, October 13, in the Medical Society's auditorium. "Braces for the Back" was discussed by Dr. Atha Thomas, of Denver, and "Braces for the Feet" by Dr. George G. Deaver, of New York. The Symposium was held in connection with the Technical Assembly of the Orthopedic and Prosthetic Appliance Profession, whose daily sessions were held at the Statler Hotel, October 12–16.

Theodore Wiprud, Secretary of the Medical Society, addressed the Prince Georges County Medical Society, October 7, at the Prince Georges General Hospital. Mr. Wiprud discussed public relations in the practice of medicine.

Dr. Ira W. Pearlman, who has been on active duty with the Navy, serving on the staff of Benmoreell Children's Clinic in Norfolk, Virginia, has been released to inactive duty and is now Senior Resident in Pediatrics and Contagion at Gallinger Municipal Hospital. Dr. Pearlman began his new duties, November 1.

Dr. Thomas A. Haedicke has returned from active duty in Korea and separated from the service. He is now residing in Atlanta, Ga., where he is with the Veterans Administration as Chief of the Medical Section, Area Medical Office.

Dr. Julius Schreiber spoke before the Virginia Mental Hygiene Society, September 30, on "Family Tensions in Modern Society."

Dr. Robert J. Furie was appointed full-time pathologist at the Frederick Memorial Hospital in Frederick, Maryland, August 1.

BOOK REVIEW

Correlative Cardiology. Carl F. Shaffer, M.D., F.A.C.P., Associate Professor of Clinical Medicine, Baylor University College of Medicine; and Don W. Chapman, M.D., F.A.C.P., Associate Professor of Medicine, Baylor University College of Medicine. Price, $9.50. Pp. 525, illustrated. Philadelphia: Saunders, 1952.

The authors are to be congratulated in producing a volume that succeeds so admirably in fulfilling its avowed purpose, "to enable the student to comprehend the manifestations of the normal and abnormal cardiovascular system through simple, concise statements correlated with diagnostic illustrations." An astonishing amount of material is covered in clear, though by no means bare, outline form, fully illustrated throughout with a variety of informative figures and charts.

In this manner the anatomy, physiology, pathology and pathologic physiology of the heart are integrated with the clinical problems of cardiology, diagnosis and management. The sections on management of heart disease incorporate the most recent additions to therapy as evidenced by discussion of hexamethonium, nor-epinephrine, exchange resins and procaine amide.

The chapters on Anatomy, Cardiac Roentgenography, Disturbances in Cardiac Rate and Rhythm, Congenital Anomalies and Coronary Artery Disease are particularly well done.

A well selected list of current references appears at the end of each chapter. The printing, paper, binding and index are entirely satisfactory.

There is subject matter of varied complexity here which could make the book of value to others than the medical student. Certainly any intern, resident or general practitioner will find it a ready source of much practical information.

John T. Alexander, M.D.

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additional current books which, in their opinion, merit comment.

A 40 Year Campaign Against Tuberculosis. Louis I. Dublin, Ph.D., Second Vice-President and Statistician, Metropolitan Life Insurance Company, New York. Pp. 115. New York: Metropolitan Life Insurance Company, 1952.

Dynamic Psychiatry—Frustrated Women. Vol. 3. Louis S. London, M.D. Price, $3.00. Pp. 132. New York: Corinthian Publications, Inc., 1952.

Correlative Neuroanatomy and Functional Neurology, 6th ed. Joseph J. McDonald, M.S., M.Sc.D., M.D., Professor of Surgery, Columbia University; Attending Surgeon, Presbyterian Hospital, New York; Director of the Surgical Service, Francis Delafield Hospital, New York; and Joseph G. Chusid, A.B., M.D., Attending Neurologist, St. Vincent's Hospital, New York. Price, $4.00. Pp. 263, with 177 figures. Los Altos, Calif.: Lange Medical Publications, 1952.

Pardon My Sneeze. Milton Millman, M.D., Fellow, American Academy of Allergists; Member, American Academy of Allergy. Pp. 217. San Diego, Calif.: Frye & Smith, Ltd., 1952.

The Esophagus and Its Diseases. Eddy D. Palmer, M.D., F.A.C.P., Lieutenant Colonel, Medical Corps, United States Army; Chief, Gastrointestinal Section, Walter Reed Army Hospital; Consultant in Gastroenterology to the Surgeon General. Illustrations by Phyllis Anderson. Price, $15.00. Pp. 553 with 95 figures. New York: Hoeber, 1952.

For Boys Only. Frank Howard Richardson, M.D. Price, $2.75. Pp. 91. Atlanta, Ga.: Tupper & Love, 1952.

Symposium on Treatment of Trauma in the Armed Forces. Sponsored jointly by The Division of Medical Sciences of the National Research Council and The Army Medical Service Graduate School, Walter Reed Army Medical Center, March 10–12, 1952. Washington: Army Medical Service Graduate School, 1952

CORRESPONDENCE

Editor's note: The following communication has come to the Secretary of the Medical Society from one of our members serving in Korea. The Society's offices will be glad to furnish Colonel Threadgill's address and to assist in any other way so that this plea for assistance will not go unheeded.

Dear Ted:

Last week I sent one of our lieutenants south of Seoul to investigate the case of our translator's brother who was supposedly sick. Lt. Williams, with some difficulty because of the high water, finally reached a tiny village to find that Chu's (our translator) brother was in a single room hut, with two obviously dying infants. The people of this 16-hut village had been supporting these patients with all they themselves were having, one bowl of rice per day.

Williams took all three to Seoul, and got them into the Seventh Day Adventists Hospital. Dr. and Mrs. Rud were in charge and were operating a 200-bed hospital and in addition were taking care of 140 orphans... Also they were running a clinic that exceeded 200 patients daily.

After we heard of this we took up a collection, in the Third Division, and at present are contributing at least to the operation of this fine hospital.

It has occurred to me that the members of our Medical Society may be interested in contributing to this very fine charity. Personally I feel that any contribution is an indication that the donor is in accord with the principles that we here are fighting for.

Any packages you might send me will be gratefully and immediately sent to this hospital. In view of the winter we are expecting, when temperatures of 25° below zero are not rare, children's overcoats and shoes would be particularly appreciated.

Sincerely,
Lt. Colonel Francis D. Threadgill,
M C., U S.A.

HOSPITAL STAFF MEETINGS

Hospital	*Day of Month*	*Time*
Alexandria	1st Wednesday	8:00 p.m.
Arlington	1st Thursday	8:00 p.m.
Casualty	1st Thursday after 1st Monday	1:00 p.m.
Children's	1st Monday	1:00 p.m.
Columbia	2nd Friday	8:00 p.m.
Doctors	4th Monday	12:30 p.m.
Emergency	4th Tuesday, Oct., Jan., Apr.	8:00 p.m.
Episcopal	1st Friday	8:15 p.m.
Freedmen's	4th Monday	9:00 p.m.
Gallinger	2nd Thursday	1:00 p.m.
Garfield	4th Wednesday	12:00 noon
Georgetown	3rd Tuesday, Oct., Dec., Feb., Apr.	12:00 noon
George Washington	1st Monday after 1st Tuesday	12:15 p.m.
Glenn Dale	Every Thursday	1:00 p.m.
Homeopathic	3rd Tuesday	1:00 p.m.
Leland Memorial	4th Thursday	8:00 p.m.
Naval	On call	
Prince Georges	3rd Tuesday	8:30 p.m.
Providence	2nd Tuesday	8:00 p.m.
Saint Elizabeths	Every other Monday	3:30 p.m.
Sibley	2nd Tuesday	8:30 p.m.
	2nd Wednesday	12:30 p.m.
Suburban	2nd Tuesday	8:30 p.m.
Veterans Adm.	2nd Saturday except July and August	9:00 a.m.
Walter Reed Army	Every Friday	4:45 p.m.
Washington Sanitarium	4th Monday	8:00 p.m.

JOSEPH STILES WALL, M.D.

(1876–1952)

In the death of Dr. Joseph Stiles Wall on September 18, 1952, Washington lost one of the most distinguished physicians in its history. Above all the good doctor, Dr. Wall was beloved by several generations of children and their parents and was an inspiration to medical students who for nearly half a century had come under his influence. A great leader in his profession, he was honored again and again by his colleagues in this country and abroad.

To those who knew Dr. Wall best, he was kindly, just, and loyal. He had an infectious smile and a good word for everyone. That he had plenty of courage he demonstrated when occasion required, but even then his gentle manner turned away the wrath of those who did not agree with him. His poise and fairness were particularly evident when presiding at a meeting, which he did with consummate skill. Never wordy and invariably impartial, he always had the situation well in hand.

Dr. Wall was an unusually gifted speaker. What he had to say he said with disarming charm, yet his words had the force of conviction which left no doubt in his hearers' minds where he stood.

Not infrequently Dr. Wall would drop in to the Medical Society's offices to exchange pleasantries with the staff, whom he always left in a happy frame of mind. He was the kind of a man that one felt better for having talked to.

The record of his professional achievements is a most impressive one, but Dr. Wall, the man, will live longest in the hearts and minds of those who knew him.

Dr. Wall was the son of Allen Wall of Pittsburgh and Elizabeth Stiles Wall, who resided in Boston before her marriage. He was born in Washington, D. C. on October 3, 1876 and received his early education in the city of his birth. He graduated from Central High School in the class of 1893. Three awards were presented to him by Central: the first, a medal in competitive drill; the second, a scholarship, after competitive examination, to the School of Medicine of Georgetown University; and the last, in 1944, a "certificate of distinction" in medicine and social service by the Alumni Association.

Dr. Wall received the degree of Doctor of Medicine from Georgetown University in 1897. He began his graduate training as an extern in Garfield Memorial Hospital, following which he was resident physician at the Children's Hospital, Washington, D. C. and later at Providence Hospital.

Following postgraduate work in New York and in Oxford, England, he engaged in the general practice of medicine for a number of years, later confining his practice exclusively to the field of pediatrics. In subsequent years he became Attending Pediatrician to Foundlings, Providence, Georgetown, and Gallinger hospitals and Consulting Pediatrician to Doctors and Columbia hospitals.

He was attached to the staff of Children's Hospital for over a period of 50 years. He was also Medical Director of the Child Welfare Society of Washington for several years, during which child health centers established by this organization increased in number from one to eight.

For 47 years following his graduation from Georgetown University he was a teacher of medicine in the Medical School. At first he was Assistant to the Professor of Chemistry, later Professor of Physiology, and during most of his years of service, Professor of Pediatrics. Georgetown University conferred upon Dr. Wall the honorary degrees of Master of Arts in 1925 and Doctor of Science in 1938.

In 1945 he became President of the American Academy of Pediatrics, following many years of service as Chairman of the Academy's Committee on Legislation. In both capacities he received commendation for his outstanding service. A testimonial dinner was given him by the Academy when he became President-elect.

The Medical Society of the District of Columbia, of which he was President in 1926 and a Life member since 1939, honored him twice, the first time on November 26, 1929, when it presented him with a scroll setting forth its appreciation for the leading part which he had taken in bringing about the enactment of the law to regulate the Practice of the Healing Arts in the District of Columbia; the second time on September 28, 1948, at the Annual Dinner held during the 19th Annual Scientific Assembly when he was awarded a certificate for his "outstanding services to the medical profession of Washington" and "his contributions in the field of pediatrics, and his unselfish devotion to the health needs of the children of the District of Columbia."

Perhaps not so well known is the fact that Dr. Wall was appointed to the Editorial Board of the

JOSEPH STILES WALL, M.D.

Medical Annals on January 29, 1946. He was much interested in the Society's publication. His writing skill has, of course, been widely recognized and his contributions to the Annals and other medical journals were numerous.

In 1951 a group of his friends in the Medical Society raised funds to have his portrait painted. The portrait, which was unveiled October 3, on his 75th birthday, at the Annual Dinner during the Society's 22nd Annual Scientific Assembly, now hangs in the Board Room in the Society's building.

In 1947 President Grau Martin of Cuba conferred upon him the Decoration of Merit, Order of Carlos I. Finlay (who first named the mosquito as the carrier of yellow fever) for his efforts to cement friendly and intimate relationships among the pediatricians of North America and those of the Latin-American Republics.

In addition to the scientific organizations mentioned above, he was affiliated with the American Medical Association, the Southern Medical Association, the American Public Health Association, and the Washington Academy of Sciences. He was an Honorary member of the Sociedad de Pediatria de Cuba and the Latin-American division of the Academy of Pediatrics. He served for many years on the Advisory Committee on Maternal and Child Health to the U. S. Children's Bureau.

Surviving Dr. Wall is a daughter, Mrs. Frances Wall Hines, of 3040 Idaho Avenue, N.W., and a sister, Mrs. Charles T. Carter, 3314 Porter Street, N.W.

Theodore Wiprud

CYRUS ROBBINS CREVELING, M.D.

(1897–1952)

Dr. Cyrus R. Creveling, an Active member of the Medical Society of the District of Columbia since 1938, died, September 19, 1952, at his home, 1339 Monroe Street, N.E. His offices were also located at his home.

Dr. Creveling was born in Lightstreet, Penna., November 30, 1898, the son of Wilbert G. and Clara Robbins Creveling. He received his early education in Pennsylvania and moved to the District of Columbia after serving in the Army during World War I.

Dr. Creveling enrolled for both premedical and medical training at George Washington University, receiving his degree in medicine in 1927. He interned at the University Hospital. He was on the staff of Sibley Hospital at the time of his death, and had engaged in general practice in the District of Columbia since 1929.

In addition to his membership in the Medical Society, he was a member of the American Medical Association, the George Washington University Medical Society, and Alpha Kappa Kappa fraternity. He was a trustee of the Brookland Methodist Church.

Surviving are his wife, Mrs. Edith Louise Creveling; a son, Cyrus R. Creveling, Jr.; and a daughter, Miss Carolyn B. Creveling, all of the home address. His mother also survives him together with two brothers, James and Samuel Creveling, and a sister, Miss Mary Creveling, all of Pennsylvania.

MEDICAL SOCIETIES WITH LIMITED MEMBERSHIP

WASHINGTON, D. C.

1952–1953

SOCIETY	PRESIDENT	SECRETARY	NO. MEETINGS PER YEAR	DATE OF MEETINGS	PLACE OF MEETINGS
American Academy of General Practice, D. C. Chapter	S. A. Thomas	M. J. Kossow	6	3rd Tuesday every other month	
Baltimore-Washington Dermatological	L. B. McCaleb	I. Zeligman	8	3rd Thursday	Alternating Cities
Clinical Club of Washington	D. C. Crain	E. C. Wilson, Jr.	8	1st Tuesday	Army-Navy Club
Clinical Society of Diabetes Association	L. J. Thomas	S. D. Loube	4	On Call	MSDC Building
Clinico-Pathological	W. P. Herbst	W. S. Anderson	8	3rd Tuesday	Homes
Diabetes Association	S. Benjamin	K. H. Mish		On Call	MSDC Building
Georgetown Clinical	R. Rush	E. Kelly	9	3rd Tuesday	Hotel 2400
Georgetown University Medical Alumni Club	M. J. McInerney	W. B. Walsh	2	On Call	
George Washington University	H. S. Hoffman	R. H. Fischer	6	3rd Wednesday, Oct., Nov., Jan., Mar., Apr., May	MSDC Building
Harvard Medical Alumni	S. Ross	F. G. MacMurray	3	Last Friday, Nov., Feb., Apr.	Homes
Hippocrates-Galen	G. J. Stuart	J. W. Latimer, Jr.	5	2nd Thursday, Nov., Jan., Feb., Mar., Apr.	Homes
International Medical Club	F. A. J. Geier	P. S. Constantinople		On Call	Mayflower Hotel
Jacobi	D. Sondheimer	L. J. Thomas	8	3rd Monday	Washington Hotel
Kober	R. S. McGrath	G. H. McAteer	6	3rd Monday	Army-Navy Club
Louis Mackall	R. Nelson	W. Howell	6	3rd Thursday	Kennedy-Warren
Medical Arts	B. Richwine	E. Parker	7	2nd Thursday	Kennedy-Warren
Osler	W. D. Jarman	C. W. Ordman	8	4th Monday	Kennedy-Warren
Pan American (D. C. Branch)	G. W. Calver	F. R. Leyva	4	On Call	Shoreham Hotel
Physician-Veterans of World War II	W. T. Spence	A. A. J. Den	2	On Call	MSDC Building
Providence Hospital Doctors Alumni Association	J. P. Lyons	J. E. Paquin	12	3rd Sunday	Providence Hospital
Reserve Officers Association, D. C. Medical Chapter	J. Whitebread, D.D.S.	F. D. Suttenfield	2	On Call	Army-Navy Club
Rheumatism	M. J. McInerney	M. C. Cobey	4	Oct., Dec., Mar., June	
St. Elizabeths Hospital	N. Taub	H. Paul	3	On Call	St. Elizabeths Hospital
Washington Academy of Medicine	W. A. Bloedorn	E. C. Albritton	3	Nov., Feb., May	Roger-Smith Hotel

MEDICAL SOCIETIES WITH LIMITED MEMBERSHIP—*Continued*

SOCIETY	PRESIDENT	SECRETARY	NO. MEETINGS PER YEAR	DATE OF MEETINGS	PLACE OF MEETINGS
Washington Academy of Surgery	J. O. Warfield, Jr.	W. R. Morris	4	2nd Monday, Oct., Dec., Feb., Apr.	Kennedy-Warren
Washington Gynecological	A. Marchetti	J. K. Cromer	5	4th Saturday, Oct., Jan., Mar., May, Dec. 6	Willard Hotel
Washington Heart Association	C. B. Ethridge	H. Carter	4	On Call	MSDC Building
Washington Medical and Surgical	G. Reeves	E. J. C. Hildenbrand	6	4th Monday, Oct.–Apr. except Dec.	Hotel 2400
Washington Orthopedic Club	J. I. Neviaser	H. L. Feffer	8	4th Monday	George Washington University Hospital
Washington Psychiatric	Z. M. Lebensohn	S. J. Rosenberg	8		MSDC Building
Washington Psychoanalytic	R. A. Cohen	D. Noble	8	2nd Saturday	MSDC Building
Washington Society of Pathologists	C. VorderBrugge	J. S. Howe	8	On Call	Walter Reed Army Medical Service Graduate School
Washington Urological	J. M. Orem	G. R. Gable	6	Every 6 weeks	Doctors Hospital
Women's Medical	J. E. Renshaw	L. I. Platt	8	1st Tuesday	

NOTE: Most of these societies begin their meetings in October and continue through April or May.

SECTIONS OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

1952–1953

SECTION	CHAIRMAN	SECRETARY	NO. MEETINGS PER YEAR	DATE OF MEETINGS	PLACE OF MEETINGS
Anesthesiology	C. E. Fierst	F. J. Grabill	4	On Call	MSDC Building
Dermatology and Syphilology	F. J. Eichenlaub	N. M. Kanof	2	Oct., Apr.	MSDC Building
Gastroenterology	J. E. Morris	H. A. Monat	4	On Call	Homes
General Practice	H. S. Gates	S. Clapp	4	4th Tuesday. Oct., Jan., Mar., May	MSDC Building
Neurology and Psychiatry	J. P. Murphy	H. H. Ammerman	8	1st Thursday	MSDC Building
Ophthalmology	J. Dessoff	R. L. Norment	3	Nov., Jan., May	Kennedy-Warren
Otolaryngology	T. F. Williams	W. B. Walters	5	3rd Tuesday, Oct., Nov., Jan.	Army-Navy Club
Pathology and Laboratory Medicine	T. M. Peery	H. H. Leffler	4	On Call	MSDC Building
Pediatrics	G. Maksim	J. E. Cassidy		On Call	Children's Hospital
Radiology	A. O. Hampton	U. V. Wilcox II	4	3rd Wednesday, Oct., Jan., Mar., May	MSDC Building

MEDICAL ANNALS
of the
DISTRICT OF COLUMBIA

VOLUME XXI *December, 1952* NUMBER 12

MENTAL PROCESSES OF THE PRESIDENT'S HEALTH COMMISSION*

PAUL B. MAGNUSON, M.D., F.A.C.S.
Chairman, the President's Commission on the Health Needs of the Nation

SOME of you may wonder why I have chosen as the title of my little talk, "Mental Processes of the President's Health Commission." I have done so deliberately, because in the next few minutes I want to bring to you a perfectly frank, "no-holds-barred" description of the way in which the 15 members of this Commission have gone about the job they were assigned to do.

When the President of the United States called me in last November and asked me to head a Commission in order to get at the facts involved in the whole health issue, neither he nor I did any pussy-footing. I told the President that I was unalterably opposed to compulsory national health insurance, and that I would never be a party to any scheme designed to further such a plan. The President replied that he had made it his business to study my record, and he had called me in for the very reason that he thought I wore no man's collar. The President said he had made certain proposals to bring more and better medical care to the people, but these proposals had precipitated an emotional argument which had clouded the issue. The President said he was not necessarily committed to any one plan—if any group could come up with a better series of proposals than the ones he advocated, he would be the first to support them if they would insure better health for all the people.

I deliberated for a long, hard week before accepting the assignment. I talked to many of the leaders of American medicine, including the then President of the American Medical Association, the current President of the American Medical Association, and several members of the Board of Trustees. At the week's end, I decided I had no choice but to accept the assignment. Although I disagreed with many of the policies of the President, I felt I had a bounden duty as a citizen to do all I could to help in furthering an investigation into the real facts of medical care in this country. I also felt a bounden duty as a doctor to participate in a mission freighted with so much import to American medicine.

From the bottom of my heart I want to say this to you doctors assembled here, and to every doctor in this country: It is our plain and simple duty as doctors to furnish leadership in every national, state, and community effort to look into ways of improving health conditions in America. If we abdicate this responsibility, if like Marie Antoinette we say, "Let them eat cake," then other elements in our society will take over and we will find ourselves under a distasteful system of medical care. If organized medicine is to retain its rightful place of esteem in our society, it had better cease and desist at once from its current policy of proclaiming that it alone can decide whether there are any health problems in this country, and that it alone can decide what the average doctor should think about the pressing problems of the day.

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* Address delivered before the Twenty-third Annual Scientific Assembly of the Medical Society of the District of Columbia at its Opening Luncheon, September 29, 1952.

Having accepted the chairmanship, I was given an absolutely free hand in the selection of the 14 members of the Commission. The President made but one suggestion to me—that I not confine its membership just to the medical profession. He said this was a problem which reached to the very core of American life, and that I draw the finest kind of representation from labor, farm, industrial, consumer, educational, and allied areas which had a deep interest in better health for more people. This I conscientiously tried to do. In the 6 weeks before the formal appointment of the Commission, I pored over list after list of prominent Americans before choosing those I thought most independent in their thinking.

When the 15 of us sat down at our first meeting here in Washington this past January, we had a few dark moments. The Presidential directive requested us to make a critical study of the Nation's total health requirements, both immediate and long-range, and to recommend courses of action to meet those needs. We were asked to look into the current and prospective supply of doctors, dentists, nurses, and allied personnel; the adequacy of local public health units; the problem of accelerating medical research; the thorny and controversial question of how to finance medical care; and, finally, to make some recommendations as to the desirable levels of governmental expenditures in the total provision of medical care.

We all agreed that it was a mighty large order, but not an insuperable one. Walter Reuther, who epitomizes in his courageous career the boundless enterprise of our country, caught the sense of that meeting when he reminded his fellow Commissioners that no problem was too great for free people to solve, and that in a year we could make a great contribution in bringing better understanding of health to our fellow Americans.

We drew up a blueprint of action at that first meeting, and we have followed it very closely since. We decided, first of all, that we would have to assess the total health resources of the country. A staff of technicians has been working on this for the past 9 months, digging into the complexities of the number of health personnel, hospital beds, health insurance coverage, health education facilities, costs of medical care, and so on. To give you an idea of the scope and comprehensiveness of their work, just for the 3-day panel in October on the financing of medical care, they have produced a 125-page basic fact book for the use of the Commissioners in their deliberations.

The second phase of the working plan, estimating the health needs of the American people, has been the toughest part of the job. We decided at the very beginning that we couldn't do this alone—we would have to call upon the best medical and lay experts in the country to help us. So we scheduled a series of 30 all-day panels in Washington on every imaginable phase of medical care. We have had panels on everything from general practice and the financing of medical education to rural health and care of the chronically ill. Each of these panels is an all-day, give-and-take session between the dozen or so people we call in to "bat" the problem around. In more than 40 years of attending medical conventions and seminars, I have seen and heard nothing to approach these panels in free-swinging, democratic discussion of the problems at hand. All of us on the Commission owe a tremendous debt of gratitude to the many national medical, labor, farm, industrial, consumer, and educational organizations which have sent us their top people for these panels.

It has been a truly stimulating and heartwarming experience to sit in and observe these people who have, despite many past differences among themselves, been willing to sit around the table in good, democratic fashion and thresh out a common problem. It has been good for the country doctor to rub elbows and break bread with the specialist and the medical educator, and it has been good for all three to spend a day with the farmer, the laborer, and the industrialist.

Let me give you an example. Back in June, we had an all-day panel on rural health. Commissioner Clarence Poe, editor of *The Progressive Farmer* and chairman of the famous Poe Commission on medical care in North Carolina, presided. Commissioner Donald Clark, a general practitioner from Peterborough, New Hampshire, served as co-chairman. The panel was made up of several general practitioners, the chairman of the council on rural health of the American Medical Association, two rural sociologists, three representatives of farm organizations, a university professor of public health, a distinguished Negro physician from Tuskegee, and several others. After the opening keynote remarks, they proceeded to dig in and battle out the problems of the small, rural hospital versus the big city one; ways and means of getting more doctors to stay in country areas; the revamping of the medical school curriculum to include more emphasis on general practice; the vast problem of getting more health insurance to low income tenant farmers; discrimination against the Negro physicians, and many more subjects too numerous to mention. At times the discussion got pretty heated, but at the end of the day a very moving thing happened. When Mr. Poe summed up the sense of the meeting there was a spontaneous burst of applause from every participant in that room.

Now we've gone a step beyond these individual panels, and that has been a tremendous amount of additional work for the Commissioners and for the staff. We have had drawn up summary documents of each of the panel subjects and circulated them to everyone who participated in these panels. We have asked for, and received some sharp, incisive comments. We never claimed that these panel digests were either perfect or final; they were rough, first drafts. We have, at all times, been completely fair, open and aboveboard in all of our dealings with these panel participants, and I deeply resent uninformed criticism which implies the contrary.

Finally, in addition to its regular meetings, the full Commission has met once a month for a 2-day session at which 2 or 3 participants from each of the panels held the previous month come together to summarize their findings and to submit to extensive questioning by the Commissioners. These are again free-wheeling sessions at which members of the various panels "lock horns" with one another and are, in turn, subjected to some mighty sharp questioning from the Commissioners. No attempt is ever made to suppress any point of view or frank expression of opinion. For example, at the last joint panel, held in August, which covered medical care, military medicine, public medical programs and hospitals, there was a hot and heavy discussion of the current shortage of clinical teaching beds for medical education. Out of this highly informed discussion there came a new understanding of the seriousness of the problem, and I think the newspaper stories on that meeting were a vital contribution to better public understanding of the problem. We have nothing to hide. We even welcome the kind of fatherly spanking we got a few weeks ago from Dr. Alan Gregg, Vice President of the Rockefeller Foundation. Urging us not to be defensive in recommending that a greater portion of our national income go toward better health for the people, Dr. Gregg said:

"I would like to stand up for this general point of view. I think right straight through all the divisions of this Commission's report we might very sensibly bring out the fact that in terms of what medicine has to offer people today, we are all just pikers. . . . In a country such as ours in the year 1948, the medical schools were languishing for the need of about $10,000,000 a year. That is in a country which spent $4,800,000,000 on tobacco, and could not raise $10,000,000 for medical education. . . . I think there has got to be a complete revolution in the general public concepts of what medicine has to offer, and I think that ought to enforce and support practically this whole report."

Having gathered this tremendous amount of testimony—we have heard from close to 400 witnesses, and the official record of these meetings runs to nearly 8,000 pages—we are now embarked on the process of working up rough draft report chapters on each of the medical subjects discussed at the panel sessions.

Now, having done all this fact-finding on the banks of the Potomac, we felt we ought to go out to the grass roots and sound the pulse of the people on the big medical questions of the day. So we scheduled a series of 8 hearings across the country. We invited anyone who wanted to, to come in and sound off at these hearings; we refused to set up a prescribed agenda or a restricted list of either witnesses or topics.

The public outpouring at these hearings has been a truly astounding and heartening thing to all of us at the Commission. They have come in from all walks of life, from the big cities and the forks of the creek, and they have given moving testimony of their deep concern with provisions for better medical care for every man, woman, and child in this country. For example, in Raleigh, North Carolina, the state Governor, the country doctor, the medical school dean, the dirt farmer, the medical society president, the insurance executive, the minister, the home demonstration agent, the state commissioners of welfare and insurance, the Negro university president, the dentist, the nurse, and just plain Joe Citizen kept the North Carolina Hall of the House of Representatives jam-packed from early morning until far into the night. The last of these hearings is being held today in San Francisco, and when the approximately 3,000 pages of testimony are in, we will have a record gathered from the deep personal experience of close to 500 Americans from the far corners of this great land.

We had one somewhat unpleasant incident in the course of these hearings, and I want to talk about it forthrightly, because it illustrates to a tragic degree the "head-in-the-sand" attitude of a segment of American medicine.

We scheduled one of the public hearings for Texas, and fixed upon the city of Houston for the hearing. Before we had even publicly announced the site or the date of the hearing, the county medical society in Houston blasted the Commission and announced in the newspapers that it would oppose the hearing because "it would be so full of error as to be harmful rather than helpful in the development of the health needs of the area."

We thought the whole blast quite unfair, but we did not want any controversy — we just wanted a representative hearing in Texas—so we moved the hearing to Dallas. We had a superb hearing there on August 18, with some of the top medical and lay people testifying from Arkansas, Louisiana, and Oklahoma, as well as from Texas. The facts brought out that day were not very flattering to the medical profession of Texas. Witness after witness, medical and lay, pointed out the high death rate in Texas from diphtheria, dysentery, and other preventable diseases, as compared to the rest of the United States; the fact that the wealthy state of Texas was sixth from the bottom in per capita appropriations for its state health department; that almost 200 counties in Texas had no local health departments; that existing statistics on the extent of disease in rural areas was shockingly inadequate; and many other points too numerous to tell you now. No one, including the regional chairman of the rural health council of the AMA, charged that any of these statements were "so full of error as to be harmful."

At the close of the meeting, the local chairman, a prominent Texas banker and oilman who is President of the Texas Health Council, got to his feet and had this to say, and I want all of you to listen to it carefully, for imbedded in it is a solemn warning to the medical profession of America. I quote:

"I am not quite as proud of my state as I was when I came in here at the start of the hearing this morning. I heard some of the figures given here . . . it really made me squirm a little bit.

"As all of you here probably know, and everyone in Dallas who knows me knows, I am opposed to so-called compulsory medical care or socialized medicine. But I do feel that it is incumbent upon those of us who are opposed to something to bring up an answer to a most pressing problem. We simply cannot oppose negatively without doing something about the thing that brings the problem to the front, and I might say, parenthetically, that in my humble judgment, if we don't do something about some of these pressing problems, we are going to get something worse. . . .

"There has been some criticism in our state by one group down in South Texas about the holding of this regional hearing. I don't think they gave the real reasons. I don't think it was really the action of a body that was intelligently informed. But one of the reasons given was that you could not, in one day, get any solution to such a vast problem. Well, there isn't any question of doubt that if that were the basis of the hearing here, it would have been a valid criticism. Certainly, we cannot in one day hope to resolve a big problem of this kind, but in going over the program here and estimating it rather generally, I find that we had approximately 500 years of experience represented on this program here. Now, you can't laugh that 500 years of experience away, and that is what you have received here today from dedicated men, men of science, men who think about their fellowmen. . . . So let's leave aside the controversy and let's attack this problem as Texas and Southwestern and American citizens, and let's begin to do something about it."

Spoken like a true Texan. This is the democratic spirit we have run into practically everywhere in the country, and it is epitomized in an editorial which appeared in *The Cleveland Plain Dealer* several weeks before the Cleveland hearing of the Commission. I quote the following:

"Both intelligence and confidence are reflected in the decision of the Cleveland Academy of Medicine to go before the session of the President's Commission on the Health Needs of the Nation here September 22 and tell its story.

"Only by getting the facts and by testimony from both sides can the Commission reach an honest, worthwhile recommendation. The local Academy has exhibited more good sense than the AMA in refusing to impugn the motives of those who wish to survey the state of our health. Only by coöperation can the Commission survey the entire picture. Then if its recommendations are off base, the doctors can and should carry their case to the people."

Now, back to the work of the Commission. In a couple of weeks, when the panel on financing of medical care has been heard, we will have completed the grueling, fact-finding work of the Commission. Then we will sit down for days at a time and work out our final recommendations to the President and the American people, trying, as far as possible, to fit these proposals realistically into the achievable health resources of this country.

Will we succeed in our gigantic task? I can only repeat what I told the National Association of Science Writers in June, that I think the report will be a powerfully annotated, realistic, honest and fresh approach to the vast problem of providing better medical care for all the people. We will not come up with any shining

(Continued on page 704)

THE ARTHRITIS PROGRAM OF THE PUBLIC HEALTH SERVICE*

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Director, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health

NO TIME or occasion could be more appropriate to discuss advances against the prevalent public health problem of rheumatic disease. Within the past 5 years, we have indeed seen, as Dr. Hench phrased it, "the end of a beginning." A problem older than history has suddenly encountered the rise of a national voluntary agency, the advent of more effective therapy, and the establishment of a Federal program of arthritis research. We have entered a new era of medical study and practice in this field.

A recent survey by the Public Health Service and the Bureau of the Census affirms the national importance of rheumatic disease.[1] Interviews with members of 25,000 households, considered representative of the country as a whole, indicate that 10,104,000 persons in the United States believe they have arthritis or rheumatism and that 6,414,000 have been told so by a doctor.†

These figures seem consistent with familiar estimates based on the National Health Survey of 1938. Allowing for population changes, it is stated that arthritis, rheumatism, and related conditions afflict approximately 7½ million persons in this country today. A million are permanently disabled. One result of rheumatic disease is the loss of 150 million man-days annually. And the cost to the Nation, in terms of lost wages, relief, and medical expense, exceeds 725 million dollars a year. It is a public problem of the first order, an enormous drain upon the country's manpower and economic resources.

Organized activity against rheumatic disease first attained national scope with the founding of the American Rheumatism Association in 1930. This professional group, now comprising about 750 members, continues to focus attention on the problem and to provide a valuable forum for discussion and exchange of experience.

Effective action against rheumatic disease was long retarded by inadequate funds. Private organizations bore a fair share of the burden—for example, the Masonic Foundation for Medical Research and Human Welfare, which has established arthritis research centers in universities of New York State. Then in April 1948 a major advance was made. Two fund-raising groups, the National Arthritis Research Foundation and the Detroit Fund for Crippling Diseases, merged to form the Arthritis and Rheumatism Foundation, and annual fund-raising campaigns on a nation-wide scale were initiated.

The funds of the Arthritis and Rheumatism Foundation, now the principal voluntary agency in this field, are used to support laboratory and clinical research, to sponsor professional and public education, and to provide facilities and services for treatment.

In 1949, when Dr. Hench and his colleagues discovered the antirheumatic properties of cortisone and ACTH, active interest in the arthritis problem was aroused among the public and the medical profession. Here at last were grounds for hope that further research would provide physicians with means for effective treatment, even mass control of rheumatic disease. And the importance of elucidating the mechanism

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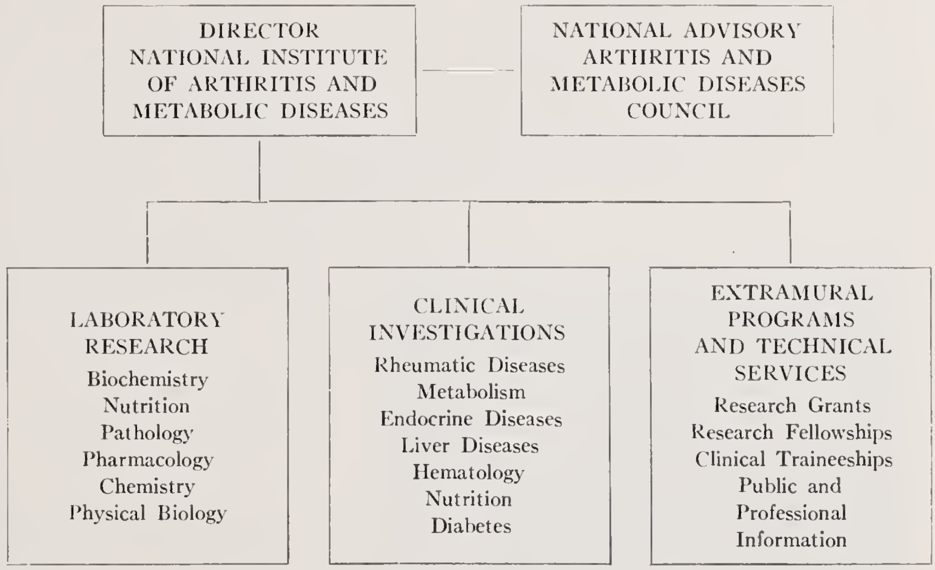
* Delivered at the 101st Annual Session of the American Medical Association in Chicago, Ill., June 12, 1952. Revised to include current fiscal data.

† Exclusive of inmates of resident institutions such as homes for the aged, mental hospitals, and prisons. Does not include rheumatic fever or rheumatic heart disease.

CHART 1

Organization and Functions of the National Institute of Arthritis and Metabolic Diseases


DIRECTOR
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OF ARTHRITIS AND
METABOLIC DISEASES
NATIONAL ADVISORY
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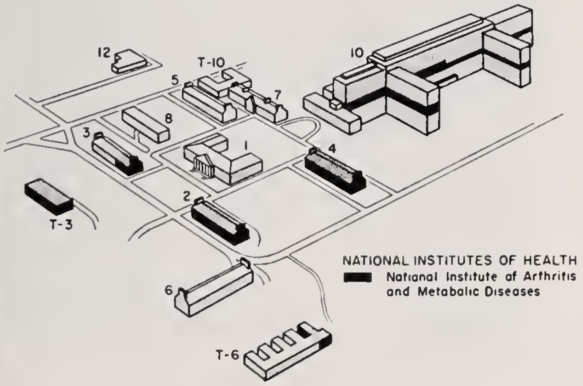
RESEARCH
Biochemistry
Nutrition
Pathology
Pharmacology
Chemistry
Physical Biology
CLINICAL
INVESTIGATIONS
Rheumatic Diseases
Metabolism
Endocrine Diseases
Liver Diseases
Hematology
Nutrition
Diabetes
EXTRAMURAL
PROGRAMS
AND TECHNICAL
SERVICES
Research Grants
Research Fellowships
Clinical Traineeships
Public and
Professional
Information

of the antirheumatic effect was widely appreciated.

One result of this new interest was Congressional action. In 1950—the year Hench, Kendall, and Reichstein received the Nobel prize for medicine—the National Institute of Arthritis and Metabolic Diseases was established within the Public Health Service. The new Institute superseded the Experimental Biology and Medicine Institute, utilizing its funds, facilities, and personnel. In the reorganization, the extramural program was broadened and the development of a branch for clinical investigation was undertaken.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NATIONAL INSTITUTES OF HEALTH
National Institute of Arthritis and Metabolic Diseases

FIG. 1. The National Institutes of Health at Bethesda, Md., indicating space occupied by the National Institute of Arthritis and Metabolic Diseases.

Now I should like to discuss in more detail the organization and activities of the new Institute, with emphasis on its arthritis studies. Figure 1 depicts an air view of the principal research arm of the Public Health Service, the National Institutes of Health at Bethesda, a suburb of Washington, D.C. Serving all the Institutes are the Administration Building (1), distinguishable by the colonnade, and the new Clinical Center (10), in the upper right corner. Space occupied by the National Institute of Arthritis and Metabolic Diseases—or as we call it, NIAMD—is represented in black. The small building to the left (T-3) is the Isotope Laboratory, available to all the Institutes but administered by us. The Clinical Center is nearing completion; admission of patients is scheduled for April 1953.

Chart 1 shows the general organization and functions of our Institute. Its primary responsibilities, as expressed in the Omnibus Medical Research Act of 1950,* are to conduct research in the rheumatic and various metabolic diseases, such as nutritional deficiency states and diabetes; to assist and foster such research in non-Federal institutions; and to provide instructions and training in diagnosis, prevention, treatment, and rehabilitation.

To meet those responsibilities, the Institute is organized administratively into three branches, representing laboratory research, clinical investigations, and extramural programs. The chart shows the present laboratory and extramural areas of activity, and also proposed areas on the clinical level. The National Advisory Councils are non-Federal groups appointed to advise the Surgeon General on activities of their respective Institutes, especially with regard to grants in aid of research and education.

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* Public Law 692, 81st Congress.

Fig. 2. Paper chromatography, a technic used in screening for precursors of cortisone and other hormones.

To return now to the arthritis program of NIAMD, I should like to describe briefly some of our current projects in that field. A section on steroid chemistry, headed by Dr. Erich Mosettig, is investigating new possibilities for producing cortisone and related compounds. Several projects to that end are conducted in coöperation with the Department of Agriculture, which is supplying the starting materials.

One such study proved the feasibility of producing cortisone and other hormones from tomato leaves, including the commercial Rutgers variety. Dr. Mosettig has worked out the steps for converting tomatidine, a crystalline extract, into a pregnene derivative. This, in turn, is useful as a starting substance for various steroid hormones needed in medical practice and research.

Studies with the Department of Agriculture include analyses of African strophanthus seeds for sarmentogenin, a steroid oxygenated like cortisone in position eleven. Other plants, American, Mexican, and African, have been analyzed for steroid sapogenins, such as hecogenin. Sarmentogenin and hecogenin can be converted readily into cortisone and other steroid hormones. As shown in the next illustration (figure 2) starting materials are screened by means of paper chromatography. A spot of the substance to be tested is placed on paper, and a solvent distributes it in a characteristic manner. The resulting pattern, indicating the identity of the substance, is revealed by spraying with a reagent.

Fig. 3. Bioassay of cortisone, using live mice as indicators.

The section on steroid chemistry works closely with our section on endocrinology, headed by Dr. Evelyn Anderson. In both experimental and clinical research, there is need for a more satisfactory method of assaying cortisone and other hormones in body fluids. The section on endocrinology has developed a bioassay sensitive to less than 1 microgram of cortisone. Used in conjunction with chemical tests, the new method permits interpretation with high specificity.

CHART 2

Research Grants Approved upon Recommendation of the National Advisory Arthritis and Metabolic Diseases Council

February 1951–June 1952

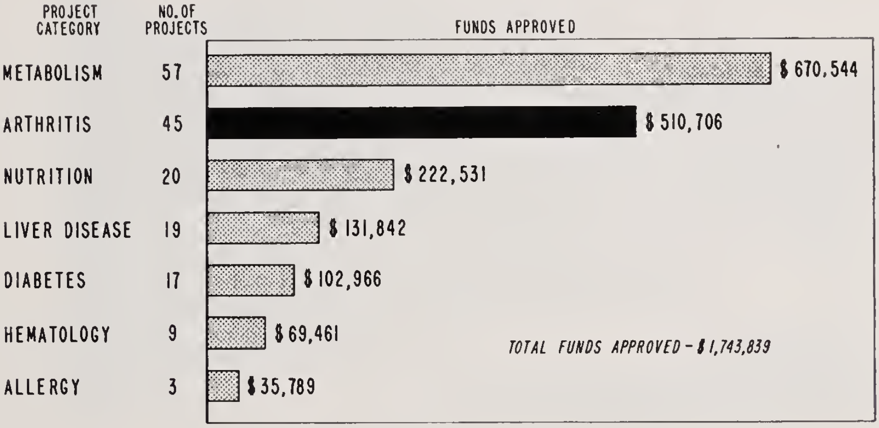

Figure 3 illustrates the bioassay technic. Adrenalectomized mice, pretreated with epinephrine, are injected with urine. After 4 hours, blood is withdrawn from the tails of the mice as shown in the photograph, and changes in the eosinophil level provide a measure of dose response to urinary steroids. If 40 mice are used per assay, measurements of cortisone are accurate to 0.3 microgram.

On the extramural side, the Institute awards research grants to non-Federal institutions, fellowships to develop research talent, and clinical traineeships for study of the prevention, diagnosis, and treatment of arthritis and the metabolic diseases.

A few words will explain the general mechanism of the research grants program. Each application is analyzed by the Division of Research Grants of the National Institutes of Health and distributed to an appropriate Study Section. The Study Sections are composed of experts from the faculties of leading institutions in the United States and Canada. Next, the technical recommendation of the Study Section is sent to the National Advisory Council of the Institute responsible for research in the field represented by the application.

Each National Advisory Council is composed of 6 non-Federal laymen who are leaders in education and public affairs, and 6 scientific authorities in the area represented by the Institute. The final decision is made by the Surgeon General in light of the Council's recommendations, and the applicant is informed accordingly.

In this program the autonomy of the investigator is preserved. We believe that research is most productive when pursued with maximum latitude and freedom from direction.

Chart 2 shows the grants approved to date by the National Advisory Arthritis and Metabolic Diseases Council, distributed according to subject of research. Support has been provided for 170 research projects in 79 institutions. These are located in 32 states, the District of Columbia, and 3 foreign countries. Other activities of the extramural program are now beginning. Twenty-five research fellowships have been awarded, and 14 physicians are recipients of the clinical traineeships only recently made available.

Applicants for traineeships must be American citizens not over 40 years of age, and must be graduates of an approved medical school, with a year's internship in an approved hospital. The annual stipend for those without dependents is $3,000; with dependents, $3,600. The purpose of these awards is to increase the number of practicing physicians with special competence in arthritis. Trainees are placed in qualified institutions of their choice.

The Institute is planning a program of clinical investigation in preparation for the opening

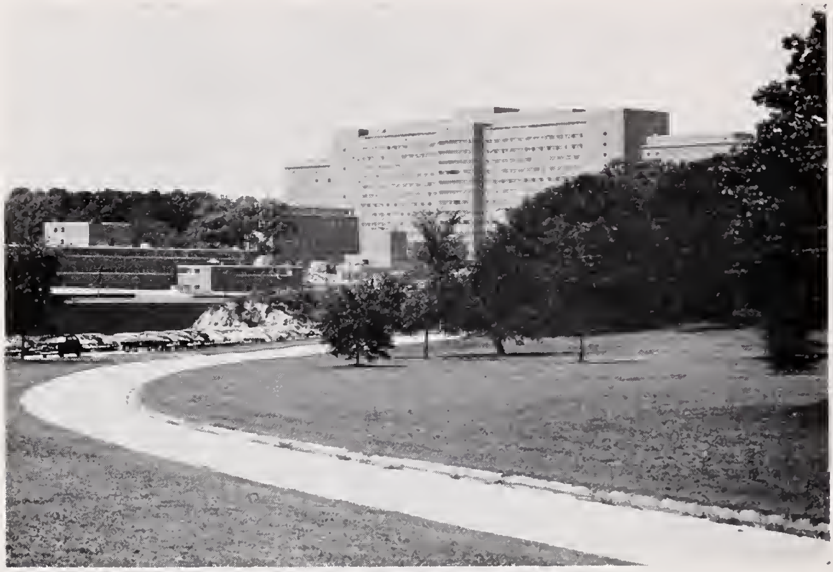

FIG. 4. The Clinical Center of the National Institutes of Health.

of the Clinical Center at the National Institutes of Health. Underlying the Center's design and projected operation is the objective of affording the best possible conditions for integration of clinical and basic research. Seventy-eight beds will be allocated to our Institute, and of those, 25 or so will accommodate rheumatic patients. Facilities will be shared with other Institutes whenever practicable. For example, we will conduct studies on rehabilitation in conjunction with the National Institute of Neurological Diseases and Blindness.

Figure 4 is a photograph of the Clinical Center as it stands today. Never before have opportunities been offered for clinical investigation on such a scale. To a great extent, however, the success of the Center will depend upon our relation with practicing physicians throughout the country. Patients will be referred by physicians and institutions, and then only when they meet the requirements of a specific problem.

Perhaps the most important advantage of the Clinical Center will lie in its unusual facilities for bridging the gap between the laboratory bench and medical practice. Promising findings that remain to be tried clinically can be evaluated here under optimum controlled conditions. The patient's home physician will receive periodic reports on progress and results of treatment, and special coöperative relations will be developed with the home physician, hospital, and health agency for care of the patient after discharge. Follow-up procedures will be a major aspect of the program.

In the new Clinical Center, types of investigation will be promoted that involve facilities and coördination of disciplines over and above what can be provided through grants in aid of research. We hope that the studies undertaken there will complement those conducted by our grantees.

One point made here about the Clinical Center—that the practicing physician will play an essential part—pertains as well to the total program of every organization now approaching arthritis as a public health problem. I mean simply that the National Institute of Arthritis and Metabolic Diseases, the Arthritis and Rheumatism Foundation, and other official and voluntary groups are working to the same end, namely, to help the arthritic through his physician. The approaches are diversified, but in each instance the ultimate objective is to help the physician provide treatment of maximum effectiveness.

In emphasizing the funds and effort directly applied to rheumatic disease, I have perhaps understated the potential contribution of many other current projects to the understanding of arthritis. Much of the investigation conducted or supported by NIAMD is basic to numerous disease categories. We can imagine how remote from Dr. Kendall's mind was the hope of helping arthritics when he isolated cortisone in 1935.

(Continued on page 704)

DIAGNOSTIC HELPS IN RHEUMATIC DISEASES

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1. In any case of metatarsalgia or sore heel rheumatoid arthritis must be rigidly excluded.

2. If there are inflammatory changes in the distal interphalangeal joints, Heberden's nodes, psoriatic arthritis and trauma should be considered. If such changes have taken place in the proximal interphalangeal joints, Heberden's nodes and rheumatoid arthritis should be considered. Such changes in the metacarpophalangeal joints, if trauma can be excluded, almost always indicate rheumatoid arthritis. Remember, "the hands are the calling cards of arthritis" (Hench).

3. Heberden's nodes are never seen in the toes; psoriatic arthritis frequently involves the pedal terminal interphalangeal joints.

4. If there is true swelling of the joint, osteoarthritis almost always can be excluded.

5. In a case of arthritis in which there is evidence of renal disease, the following should be considered: (a) lupus erythematosus, (b) periarteritis nodosa, (c) rheumatoid arthritis with vitamin D intoxication, (d) rheumatoid arthritis with chrysotherapy, (e) gout, and (f) rheumatoid arthritis with amyloidosis.

6. Most cases of chronic arthritis with psoriasis are not examples of psoriatic arthritis. Both rheumatoid arthritis and psoriasis are of common occurrence; therefore they are commonly associated. About 10 per cent of patients with rheumatoid arthritis have psoriasis.

7. A diagnosis of psoriatic arthritis in the absence of psoriasis of the nails should be made with much hesitancy. Disease of the nails in the presence of arthritis should bring to mind (a) psoriatic arthritis, (b) keratodermia blennorrhagica, and (c) onychomycosis and rheumatoid arthritis.

8. Rarely a peculiar, persistent erythema of the skin overlies the distal phalanx in a case of rheumatoid arthritis. This condition should not be confused with psoriatic arthritis.

9. Gout is a bedside, or clinical, diagnosis. If a condition cannot be identified from the history and the physical examination, the chances are it is not gout.

10. The 3 hematologic conditions most likely to be associated with gout are (a) polycythemia vera, (b) leukemia, and (c) pernicious anemia (especially when parenteral liver therapy is employed).

11. Both nephritis and obesity apparently may so compromise the uric acid metabolism of a susceptible individual as to precipitate gout.

12. Speedy reduction in the concentration of blood uric acid, brought on by the use of aspirin, indicates that gout is potentially controllable.

13. If feasible, it is wise to determine the concentration of blood uric acid of male relatives of patients with gout; familial hyperuricemia is not uncommon among the relatives of victims of gout.

14. Occasionally, in a case of gout, there is a history of uric acid stones and demonstrable tophi unaccompanied by a history of acute gouty arthritis; chronic tophaceous gouty arthritis, however, probably never occurs in the absence of a history of early recurrent acute gouty arthritis.

15. Gouty tophi should be sought in (a) the ears, (b) the elbows, (c) the knees, and (d) the tendo achillis.

16. It is not unusual for an acute attack of gout to come on as the uric acid in the blood is being therapeutically reduced. Such "withdrawal attacks" are to be anticipated.

17. The longer an acute attack of gout has lasted, the more easily is recurrence precipitated by return to ambulation.

18. If uncertainty exists as to whether a person is suffering from palindromic rheumatism

or from episodic rheumatoid arthritis, it is well to recall that this dilemma has been known to persist as long as 7 years. Episodic rheumatoid arthritis usually declares itself in 3 years or less.

19. If a patient with arthritis presents red, tender, painful finger pads, the following diagnoses should be considered: (a) palindromic rheumatism, (b) disseminated lupus erythematosus, and (c) subacute bacterial endocarditis.

20. In sacroiliac roentgenograms of adolescents and the aged, slight "fuzziness" and indistinctness may be confused with the roentgenographic changes of rheumatoid spondylitis. In the adolescent the changes probably result from lack of epiphyseal union; in the aged, they probably represent osteoarthritis caused by wear and tear.

21. If a patient with septic arthritis does not respond in 2 or 3 days to systemic chemotherapy, the chemotherapeutic substance should be placed within the joint. The drug remains in the joint longer after intra-articular injection than after parenteral administration.

22. Although there are about 200 forms of rheumatic disease, about 100 of which represent one or another type of arthritis, approximately 85 per cent of the patients who account for the 200 diagnoses referred to have (a) rheumatoid arthritis, (b) osteoarthritis, (c) rheumatic fever, (d) fibrositis, (e) psychogenic rheumatism, (f) gout, or (g) infectious arthritis caused by an identifiable microörganism.

23. When a patient who is greatly crippled from rheumatoid arthritis is encountered, strenuous efforts should be made to determine if his status is the result of fulminating disease, or if it is the result of a passive personality and lack of inclination to rid himself of potential deformity and limitation. This is very important in deciding on the future course of treatment, especially when orthopedic surgical measures are considered; much of the surgical success depends on the patient's vigorous postoperative efforts at muscle strengthening and active joint motion.

24. In 90 per cent or more of cases, monoarticular arthritis ultimately proves to be rheumatoid arthritis.

25. In a case of refractory gouty arthritis, the following must be considered: (a) occult malignancy, (b) hyperthyroidism (increased protein metabolism), (c) nephritis, and (d) blood dyscrasia.

26. When the bare feet of the standing patient are inspected, if dorsiflexion of the toes at the metatarsophalangeal joints is such that the balls of the toes do not touch the floor, rheumatoid arthritis, with subluxation at the metatarsal heads, should be suspected.

27. In the attempt to determine if there are residua of rheumatoid arthritis in the region of the ankle, side-to-side motion as well as dorsiflexion and extension should be tested. Motion of the subtalar (subastragalar) joint, which is tested by the side-to-side motion, is often lost at an early stage, when other motions of the ankle are intact.

28. The crepitation of knees which is commonly encountered usually is extra-articular in origin and not intra-articular. It apparently is attributable to ligaments and tendons passing over bony prominences as might a violin string.

29. Roentgenographic evidence of small, punched-out lesions in the phalanges may be seen in the presence of several conditions, including (a) gout, (b) rheumatoid arthritis, (c) sarcoidosis, (d) osteoarthritis, (e) trauma, and (f) ochronosis.

30. The immediate distinction between the arthritis of rheumatic fever and that of rheumatoid arthritis is sometimes difficult. In rheumatic fever the arthritis is migratory, and the previously involved joint quickly clears up. In rheumatoid arthritis the arthritis is progressive and the previously involved joint remains involved. Joints afflicted with rheumatoid arthritis are rarely so tender and painful as are the joints in rheumatic fever. The presence of a heart murmur strongly favors a diagnosis of rheumatic fever.

31. Dental roentgenograms are helpful in the presence of three rheumatic conditions. In scleroderma they give evidence of widening of the periodontal membrane, especially of the molars. In hyperparathyroidism the shadow of the lamina dura is not seen. In Paget's disease there is evidence of cementosis.

32. If gonorrheal arthritis has not completely responded to adequate chemotherapy in 10 to 14 days, probably the condition present is post-gonorrheal rheumatoid arthritis.

33. Roentgenologic evidence of calcaneal spurs usually indicates excess trauma (they are of common occurrence among basketball players) or rheumatoid arthritis. The spurs certainly do not indicate gonorrheal infection today.

34. Some helpful percentages to be remembered in reference to gout are: a. Tophi are present in 50 per cent of cases. b. Hyperuricemia eventually is present in 75 per cent of cases. c. Podagra occurs initially in 70 per cent, and eventually in 90 per cent, of cases. d. Bony erosion occurs in about 35 per cent of cases. e. Renal disease occurs in about 25 per cent of cases. f. Chronic gouty arthritis occurs in about 50 per cent of cases in which the condition is uncontrolled.

35. When confronted with an atypical case of the rheumatoid type of arthritis, in addition to considering rheumatoid arthritis one should think of (a) the so-called collagen diseases, (b) malignancy, especially of the breast or prostate gland, (c) blood dyscrasia, in children leukemia especially, and (d) occult infection, especially infectious hepatitis. In the presence of any one of these, the condition may be initially indistinguishable from ordinary rheumatoid arthritis.

36. The following will cause complete or nearly complete remission of rheumatoid arthritis: pregnancy in 90 per cent of cases of rheumatoid arthritis, jaundice (obstructive) in 60 per cent, and anesthesia in 20 per cent.

37. Raynaud's phenomena occasionally occur in the presence of rheumatoid arthritis, but the combination of Raynaud's phenomena and arthritis should draw attention, first, to the possibility of scleroderma.

38. A significant degree of ankylosis of the temporomandibular joint is of uncommon occurrence, although involvement of the joint in a case of rheumatoid arthritis is of frequent occurrence.

39. Ability to hyperextend the spinal column is usually the first function to be limited in rheumatoid spondylitis.

40. The profound aching of the myxedematous patient, and especially of one who recently has begun to receive thyroid extract, should be remembered.

41. The sedimentation rate is normal in cases of osteoarthritis, psychogenic rheumatism, traumatic arthritis, neurogenic arthropathy and palindromic rheumatism.

42. Fibrositis, pain when at rest, and the sedimentation rate generally increase with increase in the activity of rheumatoid arthritis. Moreover, synovitis can be expected as an accompaniment of rheumatoid arthritis.

43. Roentgenograms may help in distinguishing acute hemarthrosis from a nonhemorrhagic synovial effusion, since blood casts a denser shadow than is cast by synovial fluid.

44. Disturbances of the growth of children may follow rheumatoid arthritis, apparently because of interference with growth of the epiphyses. Persistence of infantile proportions of the hands or feet is of most common occurrence. There may be symmetrical shortening of limbs. Dwarfism is rare.

45. Acute symptoms referable to the joints, occurring within 7 days after operation, almost always indicate gout.

46. The concurrence of arthritis and tenosynovitis should arouse suspicion of the presence of rheumatoid or gonorrheal arthritis. Tenosynovitis occurs in 5 to 10 per cent of cases of rheumatoid arthritis and in 20 per cent of cases of gonorrheal arthritis.

47. The concurrence of arthritis and ocular complications should bring to mind rheumatoid

arthritis (iritis in 3 to 5 per cent), rheumatoid spondylitis (various ocular complications in 20 per cent), and gonorrhea (conjunctivitis in 4 per cent).

48. In podagra the medial aspect of the great toe (metatarsophalangeal) joint is most tender; in rheumatoid involvement of the hallux the tenderness is more marked when pressure is exerted supero-inferiorly.

49. Unilateral arthritis affecting the sacroiliac joint may be attributable to infection, usually tuberculous, but is more frequently a manifestation of rheumatoid spondylitis. Rheumatoid spondylitis is thus unilateral in about 1 per cent of cases.

50. Lymphadenopathy is of common occurrence in cases of rheumatoid arthritis, but, if the diameter of a node reaches 2 to 3 cm., biopsy should be performed.

51. Frequently it is necessary to distinguish traumatic arthritis from acute gouty arthritis. In gout the arthritis usually does not immediately follow the trauma, but rather suddenly appears after several hours' delay. In gout, trivial trauma often is followed by comparatively excessive distress referable to the joint. Also, in gout the arthritis often progresses to nontraumatized joints. A therapeutic test with colchicine quickly will abolish the symptoms of post-traumatic gouty arthritis but will have no effect on those of traumatic arthritis.

52. Administration of potassium thiocyanate may produce "painful osteoporosis," usually of both feet, rarely of only one foot. There are swelling, pain, duskiness of the overlying skin, and roentgenographic evidences of osteoporosis. The condition may be confused initially with arthritis.

53. Any patient who makes persistent complaint of rheumatic symptoms so severe as to be relieved only by administration of narcotics should be suspected of having a malignant tumor or of being a narcotic addict.

54. When only a few small regions of intervertebral ligamentous calcification (syndesmophytes) are present, they may be roentgenologically confused with osteophytes. Syndesmophytes, however, are rather clear-cut, dense areas of calcification, without a cortex, and of equal breadth throughout; osteophytes, on the other hand, have a broad base and are covered with a cortex arising from that of the vertebral body.

55. Gouty involvement of the shoulders, hips and spinal column is of rare occurrence.

56. Osteoarthritis almost never involves the wrists, elbows, knuckles, or feet (except "bunion joint").

57. If lumbar lordosis is normal in a patient who has rheumatoid spondylitis, the lordosis usually persists when the patient bends forward; in a normal person it is obliterated by anterior bending.

58. The concurrence of a pulmonary tumor, particularly a mesothelioma, and a variety of arthritis that is indistinguishable from rheumatoid arthritis deserves special attention. Removal of the tumor may induce lasting remission of the arthritis. Clubbing of the fingers is usually present in such cases and should bring the possibility to mind.

59. Loose bodies in the knee joint should bring to mind (a) osteoarthritis, (b) osteochondromatosis, (c) osteochondritis dissecans, and (d) ruptured medial meniscus.

CONSERVATIVE OPERATIONS ON THE UTERUS*

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THIS paper deals with conservative pelvic surgery as practiced at the Halstead Hospital over a period of 40 years. It was developed in order to preserve the gynecologic function of the female patient. This concept had its inception during the years when oöphorectomies were performed as frequently as the appendectomy for a "chronic appendix."[1,2,3] A stream of castrated women left an indelible imprint—this before the day of hormone therapy. Now with the indiscriminate use of hormonal therapy, a stream of suffering patients of a different ilk continues.

Methods of Conservation

Conservative operations on the uterus and ovary can be performed for non-malignant lesions with the object of conserving menstrual function. Preservation of the circle of circulation between the uterus and ovaries provides endometrium and ovarian function sufficient for menstruation. Conditions are thus met to prevent castration. The requirements of two theories, the circulatory and hormonal, are thereby satisfied.[4,5]

Myomectomies and endometrial polyps are the principal uterine conditions which are amenable to conservative surgery (figure 1). In both cases conservative operations are indicated in women before the menopause and especially if unmarried or nulliparous. Generally speaking, a woman busy with her family, if this consists of several children, not just one child, takes the menopause in her stride, and it is an incident rather than an event in her life. The nulliparous woman consciously or subconsciously may be hearkening to the folklore of ages past that she will no longer be attractive to her mate or that she can no longer attract a mate following the "change of life," and a sudden menopause apparently wrecks her particular environment, for a while at least, sometimes permanently. Also the younger the woman, the more distressing and debilitating are her symptoms. When dealing with an individual case, however, it is impossible to foretell just how a patient will react to an artificial menopause, no matter what her age, civil state or number of children. If she is 40 and following a myomectomy she no longer menstruates, she and her surgeon both know the tumor stimulated the bleeding. If she continues to menstruate regularly until 50 years of age, she has experienced perhaps subconsciously a satisfactory reaction that her menstrual life terminated normally and gradually.

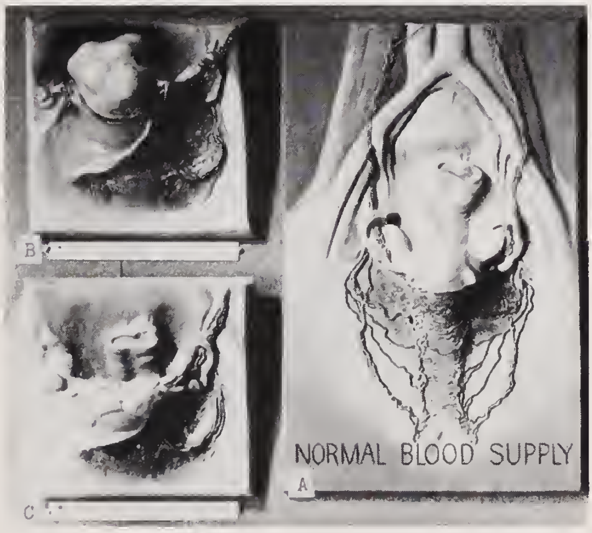

Fig. 1. (A) Normal blood supply of uterus and ovaries; (B) removal of myomas without disturbing circle of circulation between ovaries and uterus; (C) cut edge of uterus peritonealized with round ligaments.

In a younger woman a myomectomy may disturb the uterus so little that pregnancy is a possibility. The chief value lies in the fact that it is possible to tell the patient that her entire organ was retained and childbearing is a possibility. This softens the shock, especially to a newly married patient or one contemplating marriage, from the idea that she is permanently sterile.

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* Delivered at the Twenty-third Annual Scientific Assembly of the Medical Society of the District of Columbia, September 29, 1952.

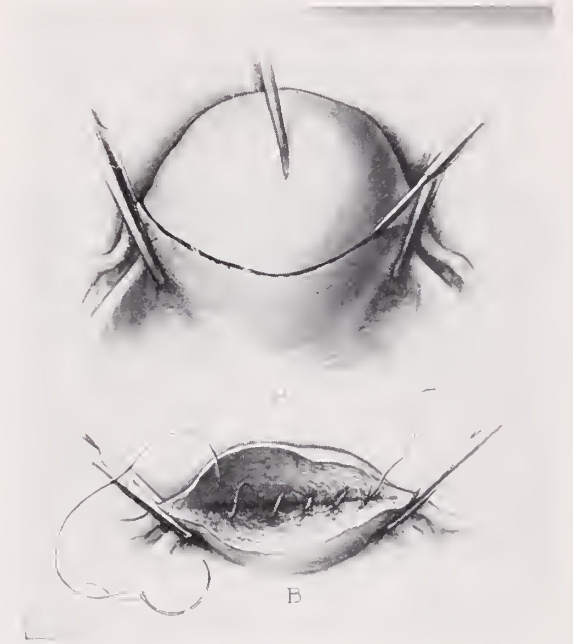

Fig. 2. (A) Defundation of uterus; (B) initial stage in repair.

The conservative operation on the uterus has been designated defundation because a portion of the fundus of the uterus is removed in a funnel-shaped manner (figures 2 and 3). This admits inspection of the interior of the uterus and removal of any offending area. It is always advisable to inspect the endometrium even when doing a myomectomy because an endometrial polyp or a submucous myoma which lies in the submucous or intramural location and which is easily enucleated can occur in the patient who harbors an intramural myoma. The lower half of the endometrium is thus not disturbed, and the collateral circulation between the uterine and ovarian vessels through the utero-ovarian ligament is intact.[6,7]

Irradiation of the pelvis is commonly resorted to for bleeding myomas or endometrial polyps. The objection to this procedure is the artificial menopause it produces. Irradiation has a place in the patient at the menopause who is a bad surgical risk, e.g., the patient who has had congestive heart failure or nephritis, or the large fat woman with a uterus no larger than a croquet ball. The pelvic bimanual examination should be confirmed under anesthesia when the pre-irradiation diagnostic curettage is done, because adnexal conditions can be missed if the patient guards herself during pelvic examination. It may also be used in the patient in the menopause who strongly objects to surgery only after a malignant lesion has been ruled out by curettage of the uterus and cervix.[8]

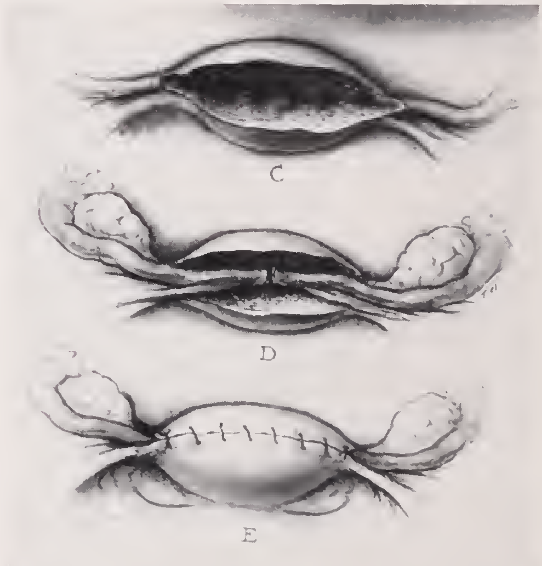

Fig. 3. (C, D, E) Completion of repair of uterine body (final stage shown in figure 1-C).

The group of patients formerly diagnosed as having glandular hyperplasia of the endometrium or atrophy of the endometrium has decreased as a surgical group since our knowledge of endocrinology has increased and diagnostic methods have become more discerning.[9] Papanicolaou stains and endometrial biopsies give an indication of the type of therapy to be used. In those patients who do not respond to endocrine therapy, surgical removal of the uterine fundus continues to be the treatment of choice.

Cervical conizations or repairs, perineorrhaphies, anterior colporrhaphies, uterine suspensions or fixations are always performed in conjunction with the uterine operation needed. The endometrial cavity and endocervix are routinely curetted preceding a conservative operation, since carcinoma of the uterus or cervix has been known to exist in a uterus containing myomas or a polyp.

Whenever there has been a question of carcinoma of the cervix, instead of a biopsy, the entire cervix has been removed in order to give the pathologist all of the material for examination. This procedure is now always preceded by cytologic examination of scrapings.[10]

Between April 1, 1928 and April 1, 1948, 5,512 pelvic surgical procedures as listed below were done on 3,519 patients at the Halstead Hospital, Halstead, Kansas.

Total number of operations on the uterus	4,674
Number of conservative operations	4,375
Number of radical operations (including 6 bilateral oöphorectomies)	305
1. Defundations (for myomas, endometrial polyps, uterine bleeding of endocrine origin,* etc.)	896
2. Myomectomies	538
3.† Uterine fixations (into anterior rectus fascia for procidentia)[11]	1,050
4.† Uterine suspensions	394
5.† Cervical cauterization or repair	1,358
6. Cervical amputations	165
7. Supracervical hysterectomies	239
8. Panhysterectomies	9
9. Vaginal hysterectomies	51
10. Unilateral oöphorectomy or unilateral excision of ovarian cyst	414
11. Bilateral oöphorectomy	6
12. Subtotal bilateral oöphorectomy	106
13. Unilateral salpingectomy	172
14. Bilateral salpingectomy	114
All procedures	5,512

* This includes cases of hyperplasia and atrophy of the endometrium which are now mostly controlled by hormone therapy.

† These groups lack records from April 1, 1928 to October 1, 1931.

COMPLICATIONS

Recurrence. Of 225 patients operated on for myomas, October 1, 1931 to October 1, 1941, 4 were recurrent tumors, and of 185 defundations for glandular hyperplasia or atrophy of the endometrium, 3 had supracervical hysterectomies, and 3 had deep X-ray therapy following surgery. Most of the patients in this group would not require surgery today but would respond to hormone therapy.

Endometrial sinuses. Seventeen patients from April 1928 to April 1, 1948 required surgical extirpation. Formerly in conservative operations the cut surface of the uterus was sutured to the anterior abdominal parietal peritoneum without peritonealizing the cut surface. If the operation was done premenstrually or if wound infection occurred, an endometrial sinus resulted in some cases. In the past 18 years, the round ligaments have been used to peritonealize the cut surface of the uterus. Only 1 postoperative endometrioma has developed in a patient in whom this latter method was used. Eleven cases of endometrioma have developed in patients who have had the uterus sutured into the anterior rectus fascia for procidentia before the menopause.

Carcinoma. There were 2 cases: (1) a defundation was performed for endometrial polyp, which was found to be malignant; (2) a patient had a uterine fixation for procidentia and returned in 10 months with inoperable carcinoma of the cervix. The cervix had not been curetted at the time of surgery. Of 152 patients with carcinoma of the uterus, cervix and fundus, diagnosed, April 1, 1928 to April 1, 1948, 26 had previous pelvic surgery. In 19, the surgery was unrelated to the carcinoma, e.g., a bilateral salpingectomy, uterine fixation, ectopic pregnancy, ovarian cyst, etc., all done an average of 17 years previously. In 7, the carcinoma was missed at the time conservative surgery was done, according to the history and findings. Two of these were our own cases as listed above.

Postoperative menstruation. The first postoperative menstrual period may be heavier than usual. The patient is advised to spend these days in bed if free flowing occurs.

MORTALITY AND CAUSES OF DEATH

The mortality figures for the two series (I, April 1, 1928 to April 1, 1948, and II, April 1, 1948 to April 1, 1952) are as follows:

Conservative Operations on the Uterus	Series I		Series II	
Operative procedure:	Number	Deaths	Number	Deaths
Defundations	896	7	203	0
Myomectomies	538	11	106	1
Uterine fixations	1,050	8	456	2
Total all procedures	2,484	26	765	3
Radical Operations on the Uterus				
Supracervical hysterectomies	239	14	89	0
Panhysterectomies	9	0	87	0
Vaginal hysterectomies	51	1	16	0
Total all procedures	299	15*	192	0

*Six of these deaths were in patients who were operated on for myomas. All others were carcinoma of the ovaries or uterus.

The causes of death were as follows:

	Conservative		Radical	
	Series I	Series II	Series I	Series II
Circulatory				
Myocardial failure, embolism, infarction	7	2	1	0
Plus exhaustive psychosis	2	0	0	0
Internal hemorrhage	3	0	0	0
Respiratory				
Pneumonia	2	0	3	0
Pulmonary embolism, infarction	5	2	3	0
Central failure, diabetic	1	0	0	0
Urinary				
Uremia in a diabetic	0	0	1	0
Acute nephritis (superimposed on an old infarcted kidney)	0	0	1	0
Inflammatory				
Peritonitis	5	0	6	0
Anesthetic—ether	1	0	0	0

With reference to the cause of death, fatalities from hemorrhage were due to mistakes in technic. The essential point in technic is that the flaps made when the diseased portion is removed must be so fashioned that they fall together without tension. If there be tension, the suture may cut through and leave a bleeding surface. If proper precaution is taken and the entire suture line is completely covered with round ligaments, the peritoneal covered surfaces heal within a few hours and hemorrhage does not occur. Another precaution has been to avoid damage to the blood vessels in the broad ligament by taking a mass ligature from anterior to the round ligament in the uterine wall to a point between the broad ligament and the utero-ovarian ligament posteriorly, and transfixing this suture just inferior to the round ligament and tube.

The mortality from all causes has steadily decreased with more efficient preoperative care, improved technic, and more intelligent postoperative care. We now follow the 4-point program of the Boston schools and the chemical therapy of Ochsner in the prevention of postoperative embolism. The table just shown indicates that progress has been made. True, the operation carries a mortality from which possibly we can never be freed, but the benefit is that the morbidity is at a minimum. The nervous balance of the woman is maintained. In rare cases pregnancy follows. The patient continues to menstruate, and consciously or subconsciously she still knows she is a woman. Therein lies the advantage of this form of treatment.

EMOTIONAL ASPECTS

Our problem does not end with conservation when a lesion exists. The never-ending procession of adolescents and adults with functional disorders of the female organs is on the march. Surgery does not cure the functional diseases of sex organs. The dysmenorrheic girl has in this day too often had removal of "a chronic appendix and something done to one ovary." Also to be differentiated are the young or middle-aged adults with pelvic congestion incidental to the highly civilized and ignorant world in which they live, or to incompatibility. Psychiatric patients with guilt complexes from real or phantasy situations are often eager for pelvic surgery.

Emotional aspects of gynecology have been evaluated with the aid of Dr. Thomas L. Foster of our Neuropsychiatric Service. Conservative pelvic surgery is especially important to the patient with psychiatric symptoms. Emotions are normally closely associated with all physiologic functions: love, hate, fear, and self and race preservations.

Sex organs are influenced by the emotions. Physiology is altered first and anatomy later. The severity and chronicity of this influence must be determined in the individual case prior to any treatment. The following categories may be listed:

ABNORMAL DESIRE FOR SURGERY

1. Desire to avoid something else:
   a. Heterosexual adjustment
   b. Childbearing
   c. Economic and social responsibilities
   d. Desire to continue childhood dependency and gain attention
2. Desire for punishment:
   a. Guilt from real situations
      1. Abortions
      2. Adultery
      3. Masturbation
   b. Guilt from phantasy:
      1. Erotic day dreams
      2. Pregnancy phantasies
      3. Death wish for fetus
   c. Death wish (hope for accident).

COMMON FUNCTIONAL DISORDERS

Dysmenorrhea

1. Starting at puberty:
   a. Frequently accompanied by persistence of tomboy activities (penis envy) and hostility toward menstrual function.
   b. Refusal to give up childhood and accept adult function. Hostility toward menstrual functions.
2. Starting in early adult life:
   a. Fear of accepting normal adult heterosexuality.

Amenorrhea

1. Amenorrhea is distressing to the patient.
   a. She feels she is different from other women and consequently abnormal.
   b. Amenorrhea is accompanied by fear of sterility or actual sterility.

Menorrhagia

Menorrhagia is inconvenient but requires treatment only if causing anemia.

Psychologic causes of menorrhagia:

1. Forced absence of association with men because of:
   a. Social taboos
   b. Neurotic situations; often relieved by normal social association without sexual activity
2. Extreme desire for pregnancy
3. Erotic situations without satisfaction (phantasy or real life).

Sex Urge

The sex urge is a basic physiologic urge, strongly influenced by superstition, religion, social customs, and occupational and legal codes. Frigidity is the most common functional complaint. It is nearly always of psychologic origin.

Frigidity

Psychologic causes:

1. Fear:
   a. Taboos learned in early life
   b. Previous experiences associated with guilt
   c. Fear of disapproval of others (parents, society)
   d. Fear of pregnancy
   e. Fear of injury to body

2. Hostility:
    a. Retainment of childish desire to be a boy; resentment of domination by a man; refusing to give man pleasure
    b. Homosexuality (occult or overt); identification of herself as a man
    c. Hostility toward the husband
3. Conflicting love:
    a. Fixation of love on some other lover
    b. Fixation of love on father, brother or other relative producing incestuous type of guilt feeling
4. Unsatisfactory situations:
    a. Husband not sufficiently aggressive to arouse desire
    b. Husband overaggressive and inflicts too much pain; gives insufficient love
    c. Husband impotent; sex urge is denied to avoid continuous frustration
    d. Coitus interruptus.

Organic causes of frigidity are rare.

Pelvic Symptoms Associated with Frigidity

1. Occasional failure to attain orgasm (usually none)
2. Occasional orgasm
3. Mild pleasure without orgasm
4. Vaginal anesthesia and indifference to intercourse:
    a. Heavy feeling in pelvis
    b. Backache
    c. Premenstrual irritability
5. Vaginal anesthesia and intercourse repulsive:
    a. Uterus tender on examination; often heavy and retroverted
    b. Ovaries and ligaments tender and congested
6. Absolute intolerance:
    a. Dyspareunia
    b. Vaginismus

Our consideration so far has been for pelvic disease, organic and functional, but women are castrated for mistaken diagnoses. One outstanding group is those related to urinary disorders. Because of the close association between the genital and urinary tracts embryologically and anatomically, symptoms of one system may simulate symptoms of the other. In a recent review of 1,020 cystoscopic examinations on 902 women at the Halstead Hospital, it was found that 76 patients had had needless surgery and that of these, 58 had had needless surgery of the pelvis. Their symptoms were reproduced during cystoscopic examination when retrograde pyelograms were made. They were relieved under proper treatment of the urinary tract. In addition, 230 patients had pelvic lesions and urinary disorders combined.

Any needless surgery is deplored. If the patient is eventually cured of her disease, however, she is happy. If she has been castrated as a byproduct, the treatment of the castrate persists. A maxim well worth following is: "When in doubt, investigate the urinary tract."

The care with which we conserve our female patients and their aftercourse is emphasized by contrast in the daily clinic as castrated women come for help. The weakness, exhaustion, inability to sleep, magnitude of problems incident to the daily routine of a home, the everlasting quest to feel like other women and be able to catch again their inner drive. . . .

After a physician has interviewed successively 5 or 6 dull-eyed, colorless, spiritless, anxious, hurt women, and some of their husbands, he is ready to say with Dr. Hertzler, "The surgeon who castrates a woman ought to have to treat her the remainder of her life." One such husband, after hearing this remark, exclaimed, "Hell, he ought to have to live with her."

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REASSURANCE

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THE patient should be reassured." How often is this advice given by psychiatrists to each other, to nonpsychiatric doctors who want to know how to cope with the nonorganic problems which make up such a formidable percentage of their practices, to social workers, ministers, and many other nonmedical dealers in human difficulties. It is advice which often results in a glow of accomplishment on the part of the adviser and a feeling on the part of the recipient that he has been told something of value which he wishes to put into effect. It is the intent of this paper to investigate the effects of this "reassurance" on the sick individual on whom it is practiced, to attempt to define what is meant by the term and how it works, and to assay the extent of therapeutic benefit derived from its use. I was motivated to study the problem of reassurance by observing how loosely and ambiguously the term has been used, by becoming aware of how often what is meant to be reassuring has a very different effect on the patient, and by noting the multiple, sometimes unexpected, ways in which beneficial effects are actually brought about when they do occur.

Reassurance is defined by the dictionary as the restoration of confidence. For psychiatric purposes it may be considered as a maneuver, usually verbal, designed to bring about the more or less immediate alleviation or relief of mental perturbation and the reinstatement of at least comparative euphoria. It is of course true that the relief of anxiety and the production of a feeling of well-being is part of the ultimate goal of any well-managed psychotherapeutic program. But it is not in the sense of a hoped-for end result of treatment that reassurance is used here, but rather as a deliberate technic which attempts to bring about such a result quickly and summarily, with a minimum of participation on the part of the patient and without regard for other therapeutic goals. This is done in various ways: by telling the patient not to worry or that he has nothing to worry about, by giving a seemingly rational, usually superficial, explanation of apparently incomprehensible difficulties, by minimizing the problem, and by universalizing it—the "you're not the only one" approach.

When statements of this sort cause the patient to feel better, there arises the question of why this happens. It seems clear that the actual content of the reassurance is insufficient to explain the comfort-producing result. Patients are not often fools, and it is demonstrably false that any neurotic person has nothing to worry about. Telling him to stop worrying adds nothing to his knowledge and must be a reiteration of something he has told himself uncounted times. When ignorance of facts about his body or about the material outside world is responsible for anxiety, explanation can be salutary and has a legitimate function. Too often explanation and information are useless, because what the patient is worrying about consciously bears only a symbolic relationship to its unconscious roots. Anyone who has ever tried to explain to a paranoid or phobic patient that his delusional belief or fixed fear is not based on present external reality will realize the futility of such an exercise. Minimizing or pooh-poohing the problem falls in the same category as telling the patient he has nothing to worry about, while the information that one's troubles are not unique would seem to provide a very tenuous basis for happiness.

Yet experience has shown that this type of reassuring discussion is sometimes, at least temporarily, effective. If we cannot accept what is said as the operative factor, we must look elsewhere for an explanation of this. All of the methods mentioned above carry as a common assumption that the person doing the reassuring is wise and powerful and that the patient is to relinquish his troubles to this omnipotent figure with the tacit assumption that something will be done about them. It seems then that it may not be the verbal content of the reassurance itself which is effective but that the effect is brought about by something in the role taken by the reassurer and in the constellation of factors which constitute the interpersonal situation between him and the person reassured. In such a situation, the reassurer is doing something positive and definite, cutting peremptorily through the tangled skein of doubts and ambivalences which confuse the patient and render him incapable of dealing effectively with his problems. The doctor or therapist may become to the patient the firm, decisive parent he wished for, or the harsh, authoritarian father he consciously rebels against but for whose uncompromising certainties he may unconsciously long. Vis à vis such a figure the patient is relegated to a trusting, childlike posture which can be very comforting and which enables him for a period to be less disturbed by his anxieties. The unconscious assumption made by the patient is that a promise has been made to him that his questions will be answered, his problems solved, his wishes gratified. The hidden promissory note here is that he will accept the omnipotent role of the reassurer and his own inferior status. This kind of relationship, applied particularly to the German people under the Nazi dictatorship, has been described by Erich Fromm in "Escape from Freedom"; and it seems likely when someone feels better after being reassured that this tendency, so widespread in our troubled times, to abdicate responsibility to whoever professes to have the answers, is being called into play.

When this kind of reassurance is beneficial, the comforting effect is often transient. It is clinically observable that in most cases it is simply ineffective. In addition, there are certainly many instances in which reassurance backfires and becomes a precipitant of increased anxiety. It may be that the reason for this is implicit in the authoritarian relationship described above, which carries within itself the seeds of its own destruction. Put in the most general terms, the cause of the failure is ignorance on the part of the reassurer of the dynamic personality factors involved, both in himself and in the patient. As mentioned, when the patient puts himself in the hands of the reassurer as a powerful authoritarian figure, he has made certain unconscious assumptions and he has a bill to present in the form of demands, which stem from the time when he was in fact an infant dependent for his gratifications on the parental figures in his environment. It may be that he has acquiesced in accepting the omnipotent role of the other in the hope that his own infantile need to be omnipotent can now be gratified. The wishes pressing through the defense barriers breached by the seductions of the authoritarian reassurer may be of various kinds, depending on the individual's psychopathology, either sexual or hostile. In any event, these wishes cannot be gratified, and the inevitable crashing of his aroused hopes will be felt as a cruel rejection, or as a confirmation of the patient's secret fear that he is worthless and unlovable, or as another betrayal at the hands of the capricious and enigmatic figures who surround him. Thus, even when temporarily seemingly helpful to the patient, its ultimate failure places the "reassurance" in the category of yet another of the succession of disappointments which have first established and then reinforced his neurosis.

In addition to the inevitable inability to assuage the patient's stimulated infantile demands, certain personality characteristics and needs of the person employing authoritarian reassurance may interfere with the relationship and thus with beneficial results. The use of such methods may be a defensive reaction of the reassurer who keeps his own pervasive unconscious doubts and ambivalences out of awareness by assuring someone else that the world is simple and that answers of a black or white character are easily arrived at. In doing this, he may be really reassuring himself more than he is the patient, especially if he is unconsciously frightened by the fears which the patient is expressing. Such reassurance may also serve as a vehicle for discharging unconscious hostility, since there can very easily be something denigrating and contemptuous in the omnipotent stance of someone who so lightly implies his ability to take over the problems of another as if they were really not very important and as if the person concerned with them must be weak and inconsequential. Another concomitant of such an attitude may be a rather considerable grandiosity with its attendant impatience and poor judgment. It is of course by no means inevitable that everyone employing authoritarian reassurance is motivated by unconscious doubt, hostility and grandiosity, but to the extent that unresolved conflicts of this kind are responsible for the choice of reassurance as a method of treatment any therapeutic usefulness to the patient will certainly be seriously impaired.

An example of how unconscious hostility can disguise itself as "benevolent" reassurance is illustrated in the case of a profoundly devious and manipulative woman with a psychogenic colitis who after two years of psychotherapy suggested that her hours be cut down. The therapist, who was finding himself increasingly irritated and frustrated by the patient, agreed to this with the "reassuring" comment that in view of recent symptomatic improvement, actually slight, he felt that she would be able to handle her problems adequately even with the decreased help. The patient interpreted this as a rejection, and at an emotional level she was quite right, since the therapist had used what was actually a testing maneuver on her part as an opportunity to express resentment resulting from his failure to understand her.

Another patient, an obsessive-compulsive woman, developed almost incapacitating headaches which were felt at first to be organic. Later she was seen by a psychiatrist who, as subsequently described by her, "patted me on the back, told me I had nothing to worry about and that a woman with a husband and children should be happy." The patient quite consciously felt his attitude as patronizing and contemptuous and was further confirmed in her deep belief in her own essential worthlessness. Her headaches, which were in large part occurring because of her inability to be aware of or express anger, became worse under the influence of the repressed resentment resulting from this treatment.

Simple reassurance fails also because, without knowing a good deal about the patient, one cannot know just what a given statement will mean to him. Without a thorough knowledge of the previous life experiences of the patient, any statement made with the intention of being reassuring can be nothing more than "a shot in the dark" and may be so at variance with the facts of what has happened to him and what he knows about himself as to be ineffective or even malevolent. If this is true in regard to the conscious remembered experience of the patient, attempts at reassurance are even blinder stabs if account is not taken of the transference relationship between the patient and doctor. What parental role the reassurer represents is of a great deal more moment to the patient than the content of what is said to him. If he is experienced, as the firm, confident father whose positive and definite qualities were a refuge against the insidious exploitations of a doubt-ridden infantile mother, the effect of a therapist's reassurances will be quite different than if he stands for a bellicose, fanatical parent who could brook no opposition. In the former case the patient will be at least temporarily reassured, while in the latter his anxieties will be increased, but in any case it is only when the history is known and a solid transference basis established that a therapist can rationally elect to make a reassuring statement with some confidence in the effect it will have.

An actively disturbed woman, whose symptoms included inability to make a decision, feelings of unreality and depersonalization, and depression, was most alarmed by the development of compulsive ideas that she might strike her child with a knife. She fled to another city where she was induced to consult a non-psychiatric doctor in the hope that something physical might be found to account for her symptoms. Physical examination proving negative, the doctor spoke to her for a few minutes and ascertained that her obsessive perfectionistic attempts to care for her baby left her very little time for herself and interfered with her sleeping. He thereupon told her in a peremptory manner that because the baby was a burden to her she had feelings of resentment which she buried in something called her unconscious, from which they emerged as lethal impulses. To the patient the doctor sounded very much like her impatient, capricious father who had proved completely unreliable during her childhood. She had had drummed into her, particularly by her mother, that any kind of hostile feelings meant loss of control, which in turn was close to insanity. What she got from the interview with the doctor was that she had been told she was losing her mind by an impatient person who wanted to get rid of her and her unwelcome demands for help. She reacted by an increase in intensity of symptoms and an abortive suicidal attempt. The doctor in the case was not only unaware of the rejecting paternal role he represented for the patient, but in his ignorance of the facts of her history he could not know that his pseudoanalytic explanation, intended as reassuring, would be heard by her as a threatening accusation.

In contrast to the type of handling described above, knowledge of the background and of the transference position may facilitate the deliberate use of reassurance for a definite purpose. An example is the case of a woman who, while in analysis, developed an exacerbation of a previously mild phobia of driving in automobiles just before a trip which was of considerable importance to her. In the hour in which this was brought up she reviewed with her therapist the traumatic events, previously touched upon, which had precipitated the phobia. At the end of the hour the therapist, who was aware that at the time he represented to her a benevolent, idealized father figure, mentioned the difference between conditions at the present and as they had previously been, and suggested that perhaps it wasn't necessary for her to fear driving anymore. This had such a sufficiently reassuring effect that the patient was able to make the trip in relative comfort, even though later on the kind of dependent relationship which made the remark successful had to be attacked analytically.

The case reported above illustrates the possibly deleterious effects of the employment of reassurance in psychotherapy even when the maneuver has been effective in bringing about symptomatic relief. Tendencies to dependency are always fostered by this technic, especially in patients with important personality components of masochism or with passive, submissive identifications. If any attempt at lasting or definitive psychotherapy is to be made, this dependency will have to be analyzed, and the therapist may find that for each occasion he has used reassurance there will be a subsequent struggle with the hostility which is so inextricably intertwined with dependent attitudes.

Another danger inherent in the attempt to assuage anxieties by the use of reassurance lies in the fact that by so doing one forfeits the opportunity of finding out what deeper fears may be behind the patient's superficial worries. By being told that what he complains of is nothing to worry about, the patient may possibly be made to feel better, but he certainly will have his curiosity stifled and will have authoritarian sanction to drop the subject, discussion of which, on a plane of interest and acceptance, might have led back to the roots of the conflict which produced the symptom. Cohen[1] has given a hypothetical instance of such an occurrence when he describes how a patient after tremendous nervous alarums and excursions finally manages to blurt out to his doctor that he thinks something is wrong with him because he eats his dandruff. The startled doctor quickly replies that there is nothing wrong with this, that some of his best friends are addicted to this practice. The patient is reassured at the time, but since the dandruff eating is actually only a psychic straw man covering up problems which are not in his awareness, no permanent benefit is brought about and the chance to inaugurate the investigative process has been lost. If the situation is one in which the doctor has no interest in helping the patient examine his problems and their origins, it will be of little moment to him that discussion is cut off and dependency increased by his attempts at reassurance, but in such an instance the possibility of effective help will be so remote and so much a matter of accident that saying nothing at all will be the wiser course. This will at least do no harm, will not add another blow to the patient's fragile self-esteem, and will not discourage him from seeking help elsewhere, whereas well-intentioned attempts to magically exorcise complicated problems in human living by the use of reassurance may have these unfortunate effects.

Reassurance is a valid psychotherapeutic technic. Like any other potent method, it has its dangers and limitations. Because it is apparently so easy to use, there is the risk of its being employed uncritically, as it were, in an interpersonal vacuum, without a proper regard for the harm it can do both by its intrinsic limitations and by its effect in shutting off further exploration of the problems involved. Of special importance is the need for the person doing the reassuring to be aware, to the best of his ability, of his own feelings and motivations and of the nature of the relationship between the patient and himself.

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President's Page

SOME MAJOR PROBLEMS

In a previous message I commented on the progress of Washington as a medical center. I now wish to point out some of our shortcomings in the hope of stirring you up to do something about them.

Alcoholics are still considered by many people, even some physicians and a few psychiatrists, as "bums" and not worthy of much consideration. Actually, alcoholism is a disease. It is very much our concern, not only for the sake of the patient, but also because of the serious social problem it engenders. Many alcoholics can be helped, mainly through the group therapy of Alcoholics Anonymous. The problem of the care of patients in a state of acute alcoholism is serious, since our voluntary hospitals usually refuse to admit such people. Our hospitals must make provision for their care, and it is up to us to convince them of this fact.

There are many emotionally disturbed people in our midst who need hospitalization, and yet I doubt that there are more than twenty-five beds in our voluntary hospitals for them. This is a lamentable condition. Every large general hospital today should have a number of beds, at least ten per cent of the bed capacity, for the care of emotionally disturbed people who may be hospitalized for a few days or weeks. There are likewise few places to care for such private patients who require special institutional care for longer periods, such as months or a year or two. For them there should be a special hospital in the city proper, and yet I have never heard anyone even express the need.

And, then, there is the problem of where to house convalescents who need some place to stay between the expensive hospital care and the home. Nursing homes are for the most part inadequate. There are not enough good ones. In a city this size why shouldn't there be a large, well-run convalescent home?

Washington has inadequate facilities for a national medical convention. There are not enough hotel rooms and there is no auditorium, except the distant, expensive and unattractive National Guard Armory, for large general meetings and smaller panel and round-table discussions. A civic auditorium worthy of the Nation's Capital is long overdue.

And, finally, there is no complete directory of medical institutions and facilities in this large metropolitan area. Even physicians who grew up in Washington are sometimes at a loss to know what to do with patients. We need badly a desk book containing all the information the medical and lay public should have at a moment's perusing. This we should be able to prepare and distribute without serious delay.

I hope the foregoing gives some energetic souls ideas for undertaking some worthwhile spade work. If a few progressive people get together on these jobs, my proposals will eventually become *un fait accompli*.

Wallace M. Yater

Editorials

ATTACKING THE PROBLEMS OF ALCOHOLISM

Early this fall, Dr. Wallace M. Yater created a new committee within the Medical Society, the Subcommittee on Alcoholism.* His decision represents a trend in progressive medical circles throughout the Nation to recognize alcoholism as a major public health problem.

Dr. Yater's decision was motivated by his own conviction that alcoholism is an illness, and a problem which therefore should receive more attention from the medical profession. He realized that most physicians shunned alcoholics and were not eager to receive or treat them. He noted that hospital facilities (often a very necessary first step in the rehabilitation of the alcoholic) were very inadequate in the Nation's Capital, which had achieved the dubious honor of having the highest per capita rate of liquor consumption in the United States. Dr. Yater was also aware that there were very few cases of alcoholism improved by psychotherapy, due either to a lack of understanding of the objectives of treatment by the patient or to a lack of understanding of the patient by the therapist. In contrast, it seemed to him that Alcoholics Anonymous was doing much more to rehabilitate the patient.

The members of the Subcommittee on Alcoholism are physicians and psychiatrists who have shown interest and understanding in dealing with alcoholics and their problems. They are now working to improve standards of medical care and to extend the available hospital facilities in the District of Columbia.

As a starting point, a questionnaire has been mailed to the members of the Society for the purpose of estimating the extent of alcoholism encountered by the practicing physician, and to learn what facilities for treatment are now available in the District of Columbia. It is the intention of the Committee to utilize this information, and all other available information, in outlining a course of treatment for the alcoholic. This plan will be available for the guidance of all physicians and hospital staff members.

The Subcommittee is also studying the existing hospital and rest homes that accept alcoholics in order to determine which of these meet acceptable standards. A list of the approved institutions will be compiled for the use of Society members and the Medical Bureau.

The Committee recommends the establishment of an alcoholic ward at Gallinger Municipal Hospital, where the alcoholic would be separated from the psychotic patients. This facility would consist of 40 beds which would be restricted to those patients who could not afford private hospital care. It would be operated under the supervision of the Alcoholic Rehabilitation Program Clinic, and would utilize the resources of both the Clinic and Alcoholics Anonymous in assisting these patients in their recovery. The successful operation of this wing at Gallinger Municipal Hospital should be helpful in overcoming the traditional reluctance of private hospitals to accept the alcoholic as a sick individual who needs medical care.

The education of both medical and lay groups will be an important function of the Subcommittee. Instruction on the care and management of the alcoholic is being planned for the hospital

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* Committee members: Dr. Earl H. Mitchell, *Chairman;* Dr. Anthony Zappala, *Vice Chairman;* Drs. M. Russell Edmonston, John D. Foley, Armond B. Gordon, Beveridge Miller, Lawrence E. Putnam, Louis H. Shuman; *ex officio* members: Dr. Charles L. Smith, dental surgeon, and Dr. Edward M. Pickford.

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the Distiict of Columbia

nursing, intern and resident staffs. The members of the Society will receive information on all available resources of treatment for the alcoholic. Through this program of education the Subcommittee hopes to provide a better understanding of the alcoholic and the acceptance of him as a valid patient.

Earl H. Mitchell, M.D.
Chairman, Subcommittee on Alcoholism

THE WORLD MEDICAL ASSOCIATION

From a modest start in 1947 the World Medical Association has grown to an organization of great size and of expanding influence throughout the world.

This world-wide organization is the lineal successor to L'Association Professionelle Internationale des Medecins which had been organized in July, 1926, in Paris by 23 European countries. The World Medical Association inherited the assets and good will of the former Association at the time of the first General Assembly in Paris, September 18, 1947, when the World Medical Association was made official by representatives from 45 national medical associations. It now embraces the membership of over 40 countries and has held 6 general assemblies as follows: Paris, September, 1947; Geneva, September, 1948; London, October, 1949; New York, October, 1950; Stockholm, September, 1951; and Athens, Greece, October, 1952. The Seventh General Assembly will be held in Holland, August 31–September 6, 1953.

The 7 general objectives of the World Medical Association are listed:

1. To promote closer ties among national associations and doctors.
2. To maintain the honor and protect the interests of the medical profession.
3. To study and report on professional problems.
4. To organize an exchange of information on matters of interest to the medical profession.
5. To present the world medical opinion to WHO and UNESCO.
6. To assist all people of the world to attain the highest possible level of health.
7. To promote world peace.

While the World Medical Association is a federation of national medical associations, the WMA United States Committee, Inc., affords membership within its structure for medical organizations, organizations allied to and serving medicine, individual physicians, and other organizations and individuals. This makes possible economic support to the activities of the world organization from United States sources.

Especially to physicians of the Washington Metropolitan Area does membership in the WMA carry an appeal, since they have frequent contacts with physicians of other nations and are aware of how small the world has become. In joining the World Medical Association they have opportunity to assist in raising standards of health, medical care and medical education throughout the world, as well as to help protect medical freedom world-wide; they may attend the general assemblies of the organization. Upon joining a member receives a certificate of membership and the quarterly *World Medical Association Bulletin*, a 64-page glossy, tri-lingual publication edited by Dr. Morris Fishbein. The October issue (Vol. 4, No. 4) of this *Bulletin* contains detailed information concerning the coming First World Conference on Medical Education, sponsored by the WMA, to meet in London, August 24–29, 1953, just before the Seventh General Assembly in Holland.

In addition members may receive all reports of the Association on request, and letters of introduction are furnished to members contemplating foreign travel.

Space does not avail to enumerate the accomplishments of the World Medical Association. However, elsewhere in this issue will be found its "Declaration of Geneva," adopted September, 1948, and its International Code of Medical Ethics, adopted in London in 1949.

A large membership among American doctors is desirable for fostering friendship and understanding between physicians of all nations and in making common cause with them. MEDICAL ANNALS calls attention to this opportunity in the hope that many local physicians will avail themselves of such membership. The annual dues are $10.

Membership may be applied for, and additional information obtained, at the office of the Secretary-General, Dr. Louis H. Bauer, The World Medical Association, 2 East 103rd Street, New York 29, New York.

H. P. R.

MOUNTING COSTS OF MEDICAL EDUCATION

The continuing appeals of the American Medical Education Foundation to the medical profession to raise funds for the hard-pressed medical schools emphasize, to physicians at least, the mounting costs of medical education. There is real worry that education for the practice of medicine may become, as it was in the early years of this century, "a rich man's profession."

A bit of history may be helpful.

From 1900 to about 1914 medical education in the United States was sharply divided into two parts. There were a few good medical schools in the major universities that turned out graduates who very frequently went on for postgraduate training in the European universities. Vienna and Berlin were two outstanding medical meccas of the period. But all this took money and only the wealthier student could afford this extended foreign education.

There were also, in this same period, scores of substandard medical schools, some no better than diploma mills, where one could obtain a medical degree (for whatever it was worth) without the expense of the larger education with its overtones of PG training in Europe.

The diploma mills, and the poorly trained men they created, were a menace to the health of the Nation. Thus the American Medical Association led the drive to close down the substandard medical schools. Through AMA pressure the Carnegie Foundation financed the exhaustive study of Dr. Simon Flexner which made notable recommendations on how medical schools should be staffed and the basic training they should provide.

At the same time the various Specialty Boards came into being (the Board of Ophthalmology was the first in the year 1916) and the standards went up even higher. All in all, a young man who wanted to enter medicine and go on for postgraduate training in a specialty had to have major financial resources to carry him over the years until, finally, he could enter private practice and attempt to earn a living.

Sizable help in this financing came from the endowment funds of the major medical schools and the large voluntary teaching hospitals affiliated with them. The student paid a token tuition that did not pay for more than 25 per cent of his medical education. Endowment funds given to the medical schools as gifts from wealthy individuals and foundations paid the rest.

But rising costs and especially the inflation of the years following World War II have dried up sources of private wealth. New endowments of major size are almost nonexistent and the existing endowment funds of universities buy only half of what they did before. Thus, more and more, the medical schools have had to raise tuition and make the prospective medical student pay a higher share of the total cost. Again it takes a wealthy student, or a boy from a well-to-do family, to contemplate a medical education.

What can be done about it? The Washington Office of the AMA calls attention to proposals that the Federal Government establish scholarships to help the individual finance his medical training. Scholarships would continue at $800 a year for 4 years to those who could qualify and can give proof of need. All direct scholarships would end after 4 years, but the holder of the scholarship would be eligible to apply for a loan of $600 a year for another 4 years. Repayment of the $2,400 loan would start 4 years after the last loan, payable in full within 10 years.

Basic step in the plan would be for the United States Office of Education to grant high school graduates with high academic grades "certificates of scholarship." From this list the neediest students would be selected for actual grants and the remainder would receive the certificates as a mark of scholastic attainment, although they could not qualify on the basis of need.

What action Congress may take on this proposal when it assembles in January is uncertain. The costs may be one stumbling block. Here are estimated expenses under the plan:

First year:	$ 32,000,000
Second year:	64,000,000
Third year:	96,000,000
Fourth and subsequent years:	128,000,000

Whether the Federal Government or private, individual enterprise should make the grants and thus exert control is a matter of concern to all who see the widening scope of the centralized Federal Government and its implications.

That is why every physician should actively support the American Medical Education Foundation in its work of raising money for medical education. If individual effort fails, Big Government is all too ready, as in the past, to step in and take over. If you have not already made your gift to the American Medical Education Foundation, do so today through your District Medical Society.

ALAN FRANK KREGLOW, M. D.
Chairman, Committee on Medical Education Fund, The Medical Society of D. C.

IT'S NOT THE COLD

For a long time it has been known that infections entering at the respiratory mucous membranes are more prevalent during our winter season. Outstanding examples are meningococcic meningitis, influenza, and pneumococcic pneumonia. Recently Waddy, writing in *The Lancet* for October 4, 1952, has related this phenomenon to the amount of water vapor in the air.

He found that air-borne infections become more prevalent when absolute humidity declines. Since he reports this to be true in tropical as well as in temperate areas, he plausibly explains that moisture content is more important than temperature. During the winter in a temperate climate, absolute humidity reaches lowest readings; hence the increased incidence of air-borne infections during our winter months.

Waddy has one practical suggestion—humidifying the indoor air, particularly in crowded places. However, entirely apart from the academic interest of his investigations and the value of his suggestion, we think that physicians in Washington may derive special fascination from the fact that it's not the cold, it's the lack of humidity.

H. H. H.

In and Out of Focus

BY THE OBSERVER

Men of Good Will

The spirit of good will is the essence of Christmas. However, to those of us who have become weary and depressed by wars, rumors of wars, suffering, hate, and cruelty there is little evidence of it at this holiday season. We often wonder what this old world is coming to anyway.

Fortunately this situation is more apparent than real, for there are men of good will—countless thousands of them—in every land no matter what its political climate. In them, of course, lies the world's hope for a brighter future.

Who are these men of good will? They are to be found in all walks of life, but most of them are just plain, ordinary, decent folks. They are readily recognizable to those who seek to know and understand them. For they are persons of obvious sincerity, unostentatious idealism, and faith which though badly shaken holds fast.

Much tripe has been inflicted upon an unsuspecting public about doctors. Slick writers of pseudoscientific articles for less discriminating magazines, highly colored fiction, and sticky soap operas would have their audiences believe that physicians are supermen. Like the heroes in the old-fashioned melodrama they possess all the virtues and none of the vices of ordinary human beings.

When such sentimental gush has been discounted, the fact remains that there is a vast army of men of good will in the medical profession. More frequently than not they are modest, unassuming men who go about their work as do any other professional group with this difference: to them is entrusted the responsibility for the health and, frequently, the continued existence of the patients under their care.

While much is made of dramatic exhibitions of professional skill, it is in the everyday association with his patients that the doctor demonstrates his real qualities as a physician. Has he conscientiously kept abreast of medical progress; does he faithfully discharge all his professional responsibilities; and is he considerate in all matters, including those of a financial nature? If so, he is not only a good doctor but a man of good will.

As a veteran of some 24 years in medical organization work, your Observer is proud of his long association with the medical profession. It gives him special pleasure to mention this fact and that he is still of the opinion that as a group there is none superior.

To all the good doctors—and there are many more than critics in and out of the profession are aware of—your Observer wishes to pay humble tribute. They are tried and true men of good will.

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Eisenhower on Medical Care

These lines were written less than a week following General Dwight D. Eisenhower's smashing victory. Physicians, with few exceptions, are still jubilant over his election. They are confident that the threat of a Federal system of compulsory health insurance no longer hovers over the medical profession. For General Eisenhower has stated categorically on more than one occasion during the recent campaign that he was unalterably opposed to "national socialized medicine."

Nevertheless, it seems to your Observer that his views on this subject might with profit be examined more objectively than was possible before election. While all of the General's statements on medical care were not available to your Observer, he believes the following excerpts from an address in Los Angeles on October 9, 1952 to be typical.

"America owes a vast and continually growing debt to the doctors, the nurses, the technicians who have worked here a great miracle of healing and health. One measure of that miracle is the fact that, since 1900, life expectancy in the United States has increased from 49 to 68 years.

"But our doctors will be among the first to admit that—at present—so many of our people live too far from adequate medical aid; that too many of our people find the cost of adequate medical care too heavy.

"How shall we deal with this problem?

"Federal compulsion, with our health supervised under a Washington stethoscope, is not American and it is not the answer. Instead of more and better medical care, it would give us poorer medical care.

"The answer is to build on the system of voluntary nonprofit health insurance plans which our people have already developed at an amazing rate. Starting from scratch hardly more than a dozen years ago, hospital insurance has expanded until it covers more than 86 million people and is still expanding. More than 65 million are insured for surgical expense.

"Much remains to be done to perfect these plans so that they really supply adequate protection. But to destroy all this, by piling Government medicine on top, would be disastrous.

"Neither the existing private health insurance nor the administration's proposal for national socialized medicine covers all the people. Neither provides adequate protection. For example, no one has yet found a way to insure against a serious illness which is not temporary but is catastrophic for the entire family concerned.

"For purposes like this, the usefulness of Federal loans or other aid to local health plans should be explored. Aid is now successfully provided for hospital construction to serve communities. But the strength of voluntary action and community administration must be preserved."

What General Eisenhower was saying in effect is this: While I am a strong advocate of voluntary action and opposed to a Government system of medical care, nonprofit health insurance plans are still inadequate. Somehow they must be made more comprehensive if they are to meet the needs of the people. I hope this can be accomplished without Government assistance.

In the same address he said that: "The safeguarding of our people against personal disaster is another part of the unfinished job of being an American," and "The Republican platform affirms that we must do more than just keep our social security program. We must improve it and extend it. This is a matter that is much on my heart."

Skeptics may point out that campaign speeches are colored by political considerations. In this instance, however, they reflect views expressed by General Eisenhower on several occasions. He has repeatedly insisted that, where social gains are concerned, we cannot "turn back the clock."

The significance to the medical profession of these views should be obvious. As your Observer sees it, this is certainly no time for complacency. Constructive action which has marked organized medicine's efforts in the past year or so must be accelerated. Organized medicine must dedicate itself anew to the task of providing "adequate scientific medical service to all the people, rich and poor, at a cost which can be reasonably met by them in their respective stations of life."

Your Observer views the present situation with confidence. He believes that organized medicine will not fail to take full advantage of its opportunity and will adequately meet the demands made upon it.

★

Prelude to Death?

Persuasive and colorful life insurance advertisements would have us believe that the happiest man in the world is the man who can afford to retire at 55. Wreathed in smiles, he's enjoying luxuries undreamed of while he was gainfully employed. Traveling to distant parts of the earth, enjoying summer and winter resorts, or just plain loafing, he is generally living "the life of Riley."

Your Observer would be the last to underestimate the importance of an adequate life insurance retirement program; in fact, he is relying upon an extremely modest one to see him through his old age. But the picture of a comparatively young man finding happiness in prolonged leisure is not only a distortion of the truth but it is a regrettable approach to what has become a serious problem.

Some months ago Dr. Edward L. Bortz of Pennsylvania, Past President of the American Medical Association, in an address, "The Challenge of Retirement," which appeared in the July, 1952 issue of *The Mississippi Doctor*, paints quite another picture.

> "A top executive of a national bank," he said, "was retired 2 years ago at the age of 64. He had looked forward with pleasurable anticipation to freedom from responsibility as well as the time, as he expressed himself, to pursue some activities that he had in mind. Within 2 months after release from his business activities and contacts he began to brood; he grew introspective, felt that he no longer had any particular program. The activities which before retirement were enticing now seemed to have little value in giving him substantial satisfaction in his daily routine. He lost interest and it was not long after that he developed a profound depression and is now under the care of his family physician."

This, Dr. Bortz says, is a typical case and can be duplicated many, many times in the experience of practicing physicians.

While voluntary retirement is often demoralizing, enforced idleness can have a far more devastating effect, Dr. Bortz says.

> "There is a biological axiom that organisms, organs, and tissues tend to die when they no longer serve a useful purpose. An aimless existence is an intolerable one and nature will have none of it. The debilitating effects of advancing years cannot be laid entirely to changes in structure with time. The loss of sustaining habits and motives which keep an individual in energetic competition to earn his daily bread may produce in a susceptible individual a definite neurosis. The loss of incentive, the loss of driving power—that something which keeps an individual in tow and in tune with his fellow man—changes him from a contributing member to a parasitic member of the social group. Then he begins to look for signs of approaching decay. He studies his anatomy and reviews one organ after another. The internal arrangements come into prominence. It is possible for an older man with nothing else to do to concentrate his attention upon some aspect of body function to such an extent that in a comparatively short time the parts become responsive to conscious thought. Minor derangement of the digestion, the heart action, or the kidneys come up for inspection. An idle person looks himself over for evidence of decay. In so doing he invites that process. Too much thinking and too much amateur anatomizing and self-purging, which an old person can easily become addicted to, starts the train of circumstances for which the family doctor must be called. . . ."

Dr. Bortz explains that pension programs were originally devised for executive personnel in industry, the purpose being to encourage their retirement at a designated age. In that way older executives were released to make room for younger men with fresh points of view, giving them opportunities for experience. Later this practice was carried over into the wage-earning group. Their experience is similar to those of executives. Unless their latter years are well planned, they fare no better.

Dr. Bortz states that employers are more enlightened in regard to this problem than they once were. Toward the close of his address he observes:

> "With a definite chronological age at which workers are expected to retire authorities point out that this is helpful because there is a definite knowledge that at a specific age retirement will come. Therefore, there is opportunity for preparation financially and emotionally to meet this deadline. Some large companies have found that as high as 40 per cent of individuals coming close to the retirement period were leaving in advance of the compulsory date. Those who favor this plan point out that with the removal of 1 top-flight executive or laborer there may be promotions for 5 to 20 individuals at lower work levels. This has a buoyant effect on morale and efficiency.
>
> "On the other hand if automatic retirement age is eliminated, each case will then need be handled individually with the result of a battle between the worker, his employer, the union, and his physician. In the final analysis the man who is an able-bodied, efficient worker who desires to keep on working, and, however, is refused the privilege of continuing because of a numerical age is the one whose needs must be satisfied. The general opinion today is against compulsory retirement fixed on chronological age alone.
>
> "In any event the necessity for pre-retirement counsel-

ling becomes evident. Industry and labor today are diligently studying all aspects of this problem. The Standard Oil Company of New Jersey is furnishing enlightened leadership in bringing to its employees who are approaching the retirement period information which will help them prepare and look ahead. They promote a positive attitude in planning post-retirement activities. In this way the unavoidable changes in the social and economic conditions following retirement may be minimized. The transition year may be a difficult period for the worker to adjust himself from the role of an unemployed member of society to that of a retired citizen.

"Research investigations are indicated to study the attitudes and motivations of the retired workman. Study groups in colleges and universities are now recognizing the need for more specific information. Adult education with particular emphasis on the needs of the large number of individuals facing retirement is essential.

"Preventive geriatrics looms before the medical profession as one of its major challenges. The hardships and suffering, diseases and depressions attendant upon lack of adjustment, lack of ability to meet the challenge of retirement is a job which the medical profession must accept. Here is a great opportunity to solve the problem before it arises."

And, finally, Dr. Bortz points out that retirement need not be a "prelude to death" but can be a highly satisfying and enjoyable experience.

As a footnote to these views, your Observer ventures one comment; that is, that well adjusted men have found happiness in retirement. A physician whom he has known for many years, long since retired, is one of the most contented men he knows. He is still living a fruitful and satisfying existence and is a heartening example to those who bewail their declining years.

★

Needed: Service Nurses

As a viewer with alarm, Dr. Gunnar Gunderson, a member of the American Medical Association's Board of Trustees, speaks with more authority and understanding on the subject of medical care than most of his colleagues. Able, realistic, and not infrequently independent in his thinking, he can usually be counted on to say what is on his mind.

Last June he addressed the American Surgical Trade Association on "The Changing Role of the Physician in His Relationship with the Hospital of the Future." Though a ponderous title, it was broad enough to permit him to "view with alarm" a number of matters. One which troubled him most was the growth of specialization in the nursing field.

"No one in his right mind would quarrel with the increasing educational standards, both prenursing and nursing, which have been put into effect through the stimulus of the American Nursing Association, any more than I would decry the continually increasing standards of education and training for physicians. As far as nursing training standards are concerned, it is particularly true in regard to the nurses who are being trained for specialized duty where modern and complicated technics are necessary. So it has perhaps become necessary to change nursing standards from those which were required by nurses when it was originally a vocational training to one which at present is of a standard which is comparable to a college degree or more. The practical effect has been that the service type of nurse has been almost entirely educated out of a job. It stands to reason that you cannot educate a person to the level of a college degree and expect a person elevated to this level to do the routine work around the bedside which, in the past, has usually been thought of as the prerogative of a trained nurse."

At this point Dr. Gunderson indulged in prophecy: "If this trend of continually raising the standards of nursing education continues, it will undoubtedly become necessary to go backwards a step and train two classes of nurses: (1) the highly educated type of nurse who would be used for administrative purposes, for teaching, and putting into use the more specialized technics, and (2) the service type of nurse whose duty it would be to do routine work at the bedside."

His conclusion: "What the American public needs more than anything else in the field of nursing care at the present time, in my humble opinion, are service nurses who are capable and willing to take care of the routine work necessary to a progressively aging population."

Things Better Unwritten These comments have, for reasons of modesty, been placed last in this month's column because of their more or less personal nature. They have to do with what occupies a considerable part of your Observer's time; that is, writing for one purpose or another, not the least being for this column.

Doctors have often said to your Observer: What you could write about physicians would provide lively and highly interesting reading. Maybe so and maybe not. At any rate he is not interested in revealing for the purpose of attracting attention intimate facts that he has learned. As he sees it, there is no object in writing for publication unless it is honestly done and for a worthy purpose.

Because of his official position there are naturally restrictions on what he can write. He is required to exercise the best judgment of which he is capable in his choice of material and not venture opinions contrary to established policies of the Society. Discussion of local controversial issues, especially those highly charged with emotion, he has learned are more appropriately confined to official reports and statements of elected officers.

Despite these prohibitions he has not been as restricted in expressing himself as one might expect. He has been given wide latitude in commenting on medical socioeconomic issues. This is the logical sphere for his observations and in the dozen years he has been conducting this column he has endeavored to highlight the opinions of others as well as to air some of his own.

In light of the above, readers may be interested in the rules to which he adheres in preparing editorial material for the MEDICAL ANNALS. Here they are:

1. Do not venture outside the medical field unless the subject matter has some direct relation to it. Your Observer had his saddest experience because he violated this rule.
2. Avoid criticism of things past unless they have a bearing on the present.
3. Write forthrightly and as convincingly as possible.
4. Avoid philosophizing or preaching. It is a temptation for your Observer to moralize. His "severest critic" reminds him of this frequently.
5. Adhere to a readable and informal style.
6. Avoid using superlatives in describing an event or person. They are usually not warranted or in good taste.
7. Quit when you have nothing further to say.

This seems a good point to bring this month's column to a close.

T. W.

NEW RADIO SERIES ON MENTAL HEALTH

In coöperation with the Medical Society of the District of Columbia, WOL is presenting a new series of programs on Mental Health in the District of Columbia on Friday evenings at 10 p.m. Under the general title, "Your Mind and You," each program in the series is devoted to a discussion of a single problem and features a panel of two or more local physicians who are expert in the problems under discussion.

The idea for a mental health program series grew out of a documentary program produced last spring by WOL on vandalism in the District schools. In the process, the station staff discovered that some of the causes of vandalism were rooted in the home relationships of the children. Discussions on vandalism with the Subcommittee on Mental Health of the D. C. Medical Society led to the suggestion of a radio program series designed to help create a broader understanding of the basic principles of mental health, and specifically to find out what the District is doing about promoting mental health.

Moderator for the series is Mr. George Campbell, WOL Program Director. Drs. Roger S. Cohen and Albert E. Marland participated in the inaugural program, November 14. The topic discussed was, "Who Visits a Psychiatrist?" Other programs have centered on such topics as "What Is Mental Health," "Psychiatric Facilities in the District," "Parent-Child Relationships," and "Depression."

Future topics listed for discussion are:

December 19	"Psychiatric Problems of the Aged"
December 28	"Marital Problems"
January 2	"Psychosomatic Medicine"
January 9	"Fears and Phobias"

Listeners are invited to submit suggestions for topics to be discussed. Letters may be addressed to "Your Mind andYou," in care of the Medical Society of the District of Columbia, 1718 M Street, N.W.

Dr. Robert H. Groh is Chairman of the Subcommittee on Mental Health, which is coöperating with WOL in this radio series; Dr. Cohen is Vice Chairman. Other members of the committee are Drs. Marland, Norman Q. Brill, Lester L. Burtnick, John R. Cavanagh, Isadore Rodis, Joseph M. Rom, Marshall deG. Ruffin and Harold Stevens.

DECLARATION OF GENEVA

Adopted by the General Assembly of The World Medical Association at Geneva, Switzerland, September, 1948

AT THE TIME OF BEING ADMITTED AS MEMBER OF THE MEDICAL PROFESSION:

I SOLEMNLY PLEDGE myself to consecrate my life to the service of humanity.

I WILL GIVE to my teachers the respect and gratitude which are their due;

I WILL PRACTICE my profession with conscience and dignity;

THE HEALTH OF MY PATIENT will be my first consideration:

I WILL RESPECT the secrets which are confided in me;

I WILL MAINTAIN by all the means in my power the honor and the noble traditions of the medical profession;

MY COLLEAGUES will be my brothers;

I WILL NOT PERMIT considerations of religion, nationality, race, party politics or social standing to intervene between my duty and my patient;

I WILL MAINTAIN the utmost respect for human life, from the time of conception; even under threat, I will not use my medical knowledge contrary to the laws of humanity.

I MAKE THESE PROMISES solemnly, freely and upon my honor.

WOMAN'S AUXILIARY NOTES

The November meeting of the Woman's Auxiliary to the Medical Society of the District of Columbia was held on Wednesday, November 12. An interesting and informative talk was given by Dr. Cyrus H. Maxwell, Assistant Director of the Washington office of the American Medical Association. The subject of the talk given by Dr. Maxwell was "What Is the AMA?"

A tour of St. Elizabeths Hospital followed the meeting. This was in accordance with the suggestion made by Dr. Wallace M. Yater, in his speech to the Woman's Auxiliary in October, that doctors' wives acquaint themselves with the facilities offered by the various hospitals in Washington. The next hospital scheduled for such a tour will be Gallinger Municipal Hospital.

The various activities scheduled for the year are coming along with enthusiasm. Many new faces are seen on the bowling alleys on Friday mornings and the high scores some of the newcomers are rolling up are causing some of the old-timers to watch their laurels. The swimming group is meeting on Monday mornings, with classes for both advanced and beginners. The women are enjoying this sport and are becoming quite adept at it. If you are interested in sports contact Mrs. Lawrence A. Rapee. The doctors' wives are bringing their husbands to the evening dancing and bridge classes and it is not too late to enroll if you are interested in either of these classes.

The Flower Arrangement class for the fall has started and the women are arranging attractive decorations in their homes, using dried flowers, fresh flowers, and fruit. The Ceramics course is under way and has several enthusiastic members.

However, social activities are not the only interests of members of the Auxiliary. They are planning ways and means to remodel the kitchen, of raising funds to continue their six scholarships for nurses, and they are asking for donations of warm clothing for KARTONS FOR KOREA. A letter has been received from one of our local doctors, Lt. Colonel Francis D. Threadgill, a member of the D. C. Medical Society, now stationed in Korea, asking that warm clothing be sent to a small hospital of 200 beds which is doing excellent work among the civilian population of Korea. This same hospital also runs a clinic and cares for 140 orphans. Colonel Threadgill particularly requested donations of children's warm clothing and shoes. The women all volunteered their support in this project.

MRS. LEO C. VARDEN
Publicity Chairman

INTERNATIONAL CODE OF MEDICAL ETHICS

Adopted by the General Assembly of The World Medical Association at London, England, October, 1949

DUTIES OF DOCTORS IN GENERAL

A DOCTOR MUST always maintain the highest standards of professional conduct.

A DOCTOR MUST NOT allow himself to be influenced merely by motives of profit.

THE FOLLOWING PRACTICES are deemed unethical:

a) Any self advertisement except such as is expressly authorized by the national code of medical ethics.
b) Taking part in any plan of medical care in which the doctor does not have professional independence.
c) To receive any money in connection with services rendered other than the acceptance of a proper professional fee, or to pay any money in the same circumstances without the knowledge of the patient.

UNDER NO CIRCUMSTANCES is a doctor permitted to do anything that would weaken the physical or mental resistance of a human being, except from strictly therapeutic or prophylactic indications imposed in the interest of the patient.

A DOCTOR IS ADVISED to use great caution in publishing discoveries. The same applies to methods of treatment whose value is not recognized by the profession.

WHEN A DOCTOR IS CALLED UPON to give evidence or a certificate he should only state that which he can verify.

DUTIES OF DOCTORS TO THE SICK

A DOCTOR MUST always bear in mind the importance of preserving human life from the time of conception until death.

A DOCTOR OWES to his patient complete loyalty and all the resources of his science. Whenever an examination or treatment is beyond his capacity he should summon another doctor who has the necessary ability.

A DOCTOR OWES to his patient absolute secrecy on all which has been confided to him or which he knows because of the confidence entrusted to him.

A DOCTOR MUST GIVE the necessary treatment in emergency, unless he is assured that it can and will be given by others.

DUTIES OF DOCTORS TO EACH OTHER

A DOCTOR OUGHT to behave to his colleagues as he would have them behave to him.

A DOCTOR MUST NOT entice patients from his colleagues.

A DOCTOR MUST OBSERVE the principles of "The Declaration of Geneva" approved by The World Medical Association.

HOW TO PREPARE A SPEECH*

J. H. HENNING, Ph.D.

Head, Department of Speech, West Virginia University College of Arts and Sciences

You have invited me here today to tell you how to prepare a talk—or a speech. I consider them one and the same thing. I wish that I could say to you that I bring with me a magic formula, a stock prescription which will produce a well composed speech. But I must tell you that there is no brief way, no short cut to skill in speech composition. Effective public speech is an art based upon a solid body of theory that has developed over a period of two and a half thousand years. As such, it is not to be picked up in "ten easy lessons" or by no lessons at all, nor as the result of one brief lecture such as this. So, I can do little more in the time allotted to me than to suggest some basic principles as guide posts and to offer a simple, but sound outline of procedure for preparing a speech.

First, some basic principles:

The conceptual and philosophical basis of speech must be that it is *not* a set of rules, *not* a formula, *not* a series of directions, but is a *method*, entirely functional in nature, by means of which men seek to dissolve conflict, arrive at solutions to problems, control their environment, and move society in socially desirable directions.

Good speaking presupposes and requires broad knowledge. Speech itself deals, as I have just stated, with method of communication, not with subject material. The subject material of speech must come from areas other than speech. And the field is limitless, because every possible subject known to man is adaptable to rhetorical methods for the act of communication. The dean of a well known medical school said recently when asked what kind of a premedical education his students should have: "Give them anything but medical subjects; give them an education." This wise man recognized that even a doctor must live, must adjust himself to society, must understand people, events, institutions, trends, government, and must be able to think, must have knowledge beyond his immediate professional information. Knowledge is the "stuff" of speech. Without something worthwhile to talk about, speech becomes dust, an empty shell, a meaningless exhibition, a waste of time.

But knowledge alone does not produce skill in communication. And by "skills" I mean much more than the development of a good voice and the ability to make nice gestures. By "skills" in speech I mean the complete speech act—choice of material, organization, style, delivery, and memory, for speech is a five-fold act and is incomplete if any of its five parts is missing. This five-fold concept of speech was established implicitly by Aristotle in his *Rhetoric* and explicitly by Cicero in his *De Oratore*. It is still basic and fundamental. These five divisions of the rhetorical act still are:

1. *Invention*—which means the choice of material, the selection of ideas, the method of supporting or establishing their truth, the adaptation of that material to the particular audience situation, the determination of a purpose for the speech, the framing of an audience response, and the consideration of negative instances or contrary ideas.

2. *Arrangement*—the organization of the inventional material into coherent form, clear relationships, unified and harmonious effects in terms of the audience situation, the occasion, and the purpose of the speaker.

3. *Style*—which concerns itself with the selection of words with which to express the ideas selected in the inventional process, and the arrangement of those words into sentence form in such a way that the result will be clarity of meaning, forcefulness of expression, and exactness of idea.

4. *Delivery*—which has to do with the vocal and physical aspects of the communicative act, the factors of articulation, pleasantness, correctness, and audibility of voice and the utilization of gestures, facial expressions, and bodily posture which will aid in the communication of the ideas being expressed.

5. *Memory*—which, in classical times had a different meaning from what it does today. Then it meant the ability to remember knowledge learned. Today memory refers somewhat to the same thing, of course, in that he who can remember his knowledge best has much of it available for ready use in speech situa-

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* An abridgment of the address delivered at the Conference on Medical Teaching Technics of the Medical Society of the District of Columbia, April 4, 1952.

tions. But it also refers to the memorizing of outlines, the ability to think on one's feet, and to extemporize readily.

Thus, we can say that speech is the integration of ideas, words, voice, and action for the purpose of effective communication.

When this definition is applied to a public speech or talk, it is necessary that we recognize the principle of specificity. A speech is not just anything prepared for anyone by anyone for just any reason. A speech involves a particular person, speaking to a particular audience, on a particular subject, for a particular purpose. It is true that it represents the integration of ideas, words, voice, and action for purposes of effective communication, but it likewise is true that a specific individual is giving the speech, that it is being given to a specific audience, that it is prepared on a specific subject, in order to accomplish a predetermined specific purpose.

No man is master of an idea until he can state it simply. The use, therefore, of simple, concrete, exact language for the expression of the ideas in a speech is the desirable style. No more telling example can be found than Lincoln's Gettysburg Address. The first sentence of that address contains 30 words. Of these 30 words, 20 of them, or 2 thirds, are 1-syllable words. Five are 2-syllable words, and the remaining 5 are more than 2-syllable words, 3 of them being 3-syllable words and the other 2 running to 4 syllables each. I don't believe I need to comment to this audience on the clarity of expression in this famous speech, nor upon the forcefulness of its style. I recommend it as a model of effective expression of ideas well mastered by their possessor.

The public speech must be meticulously prepared. Ideas must be carefully chosen, their organization must be cogent, the language used must make clear the meaning as it is uttered. All of this is true because of the very nature of the public speech. In ordinary informal social speaking, if the listener does not understand he can ask a question, make a comment, or indicate disagreement. In the public speech situation the audience cannot ask questions, nor can they take time to reflect about some particular statement the speaker makes, because if they do they miss what is now being said—the speaker is going on. Thus some of what is said is lost to the listener.

And, finally, the principle of speech content must be mentioned; stated categorically and without reservation, that principle says: No speech is better than the ideas—the materials—that go into it. This does not mean, of course, that the other four phases of the speech act are unimportant, but it does mean that no amount of organization, style, or delivery technics can compensate for a lack of worthwhile ideas—something important enough to say.

Speech Content and Methodology

That brings up two questions: What should go into the speech and what is the methodology to be followed?

In brief answer to the first, I would say that what goes into the speech is pretty largely up to the speaker himself. It's for the speaker to say what will compose the speech. It should be worthwhile material, of course, but beyond that I might also say that the speaker, in this case, at least, should emulate the doctor. He, the doctor, gives people what he thinks they need and not necessarily what they might like. So the speaker. He should say to his audience what he thinks should be said, what they need to hear, and not always what they might like to hear. Only thus does society improve and advance.

Now to attempt to answer the question regarding the methodology to be followed in preparing a speech. First, let me urge you to begin your preparation well in advance of the speaking occasion. A good speech is a creative process. Very few speeches are the result of a sudden inspiration, a complete and wonderful effect of a sudden cause. Most speeches grow with time. And the shorter the speech, the earlier the preparation should begin. In short speeches every word, every idea counts. Compositionally, a short speech is much more difficult than a long one.

As to the method to follow, again let me remind you that I have no short cut, no magic formula to offer. I present to you only a simplified method which I believe is sound. Speech preparation begins with the speaker himself: what he is as a person, his attitudes, his knowledge, his thought patterns, his character, his integrity. Long ago Aristotle stated for us the three and only three modes of persuasion: (1) *ethos* (the character, intelligence, and good will of the speaker himself); (2) *logos* or *pisteis* (the logical content and consistency of ideas—in fact, the truth); and (3) *pathos* (appeals to the emotions for moving people to action). Of these, Aristotle pointed out, though logic is the heart and soul of the inventional process, the character of the speaker himself is perhaps the most potent of the three in its effect upon an audience. I could discourse at great length on this one phase of speech preparation, but I shall forego the temptation, except to say: If you are going to give a speech, become a person worth listening to, if you are not already. Keep yourself alive beyond your professional walls by reading provocative literature, listening to good music, attending worthwhile drama, and maintaining an interest in art. Avoid associating with people who are social parasites, wasters, and intellectual bankrupts—people who are willing to gamble away their lives for small stakes. Keep yourself mentally alert and generally informed.

Audience Response

Assuming, then, the worth of the speaker himself, the preparation of a speech moves through certain definite and chronological stages or steps: (1) the selection of a subject and the determination of the material, the ideas, that will go into the development of that subject; (2) a careful analysis of the audience situation; (3) deciding upon a definite purpose for the speech; (4) determining and phrasing the particular response to be sought from the audience—that is, what you want the audience to do as a result of this speech; and (5) adapting the materials selected to the audience response sought.

Richard C. Borden, in a small book called "Public Speaking as Listeners Like It," states that in preparing the speech, the speaker must anticipate four definite audience reactions and take steps in his planning to meet and overcome them. These four reactions, according to Borden, are:

1. Ho hum! (when the speaker is announced)
2. Why bring that up? (when the subject is revealed)
3. For instance? (Quit being general and give us some examples.)
4. So what? (What do you want *us* to do about it?)

While this is an oversimplification of the speaker's compositional problems, it nevertheless is suggestive. Knowing that you habitually think in terms of medical procedure, I will suggest an analogous process for the preparation of a speech and then elaborate upon it briefly. It consists of four parts, diagnosis, analysis, ingredients, and last, "sugar-coating the pill." You might call the last two the "prescription."

In proceeding with the diagnosis step, certain questions will suggest the process involved here. The prospective speaker needs to ask himself, for example;

What is the occasion?

What am I qualified to speak on to this group?

How long am I to talk?

How can I adapt to this particular occasion a subject I am qualified to speak on and then adequately discuss it within the limits of time at my disposal?

After arriving at answers to such questions as these, the second step, analysis, begins. Here, again, certain questions suggest the method:

What is the audience situation? (technical, popular, mixed, etc.)

What will be their attitude toward me personally?

What will be their attitude toward my subject?

In view of the type of audience and their attitude toward me and my subject, what, specifically, can I expect from them in the way of a response to my speech? (open-mindedness, agreement, action?) What, then, should be my purpose for this speech?

- Merely entertainment?
- Information only?
- Drive at conviction?
- Move to action?

The proper answers to these questions provide us with a subject which is chosen to fit the occasion and time limit; a knowledge of the type of audience we will face and its attitude toward us and our subject; and general information as to what we will try to accomplish in this particular speech.

Now we are to determine the ingredients of the speech which will work to accomplish the purpose we have selected and obtain the audience response we have chosen. Here the question is: In terms of the audience situation, the occasion, the time limit, my purpose, and the audience response, what ideas will I present and what will I omit? This usually is the most difficult question for the speaker to answer. May I suggest a fairly simple yet sound method of arriving at its solution. First, I would suggest that you phrase what I call a subject sentence. A subject sentence is merely a sentence beginning with the speech topic itself as its subject and a statement of the speaker's attitude toward his subject as its predicate. For example: Tariffs should be abolished. That is a subject sentence, naming the subject, tariffs, and stating the speaker's attitude toward his subject: should be abolished. Any subject sentence, of course, should be stated within the framework of the general purpose of the speech. If the general purpose is to instruct, the subject sentence should be stated in terms of instruction. For example: Speech is an overlaid function, or: An appendectomy is a fairly simple operation. If the purpose of the speech is to convince, the subject sentence would indicate the purpose by its phraseology. For instance: Standards of admission to medical schools should be changed, or: Our Government should adopt a uniform foreign policy.

When the subject sentence has been properly phrased, the organizational pattern of the speech will be revealed rather clearly if an imaginary "because" or "since" or "as shown by" is added to it and then each of the major reasons for making the statement in the subject sentence is set down. Again to illustrate: Our general purpose is instruction; our subject sentence is: Speech is an overlaid function. By adding to that statement the word "because" we find two very definite divisions of a speech which will determine its organizational pattern. The first of these is (including the statement of the subject sentence): Speech is an overlaid function (because) I. The act of speaking utilizes specific nasal, oral, pharyngeal, laryngeal, and respiratory structures. And speech is an overlaid function (because) II. All of the structures involved in the speech act are biologically meant for other purposes. These two major divisions of the speech, then, become clear, and we proceed with amplification of each of them from that point. Our organizational structure, however, has been determined by the statement of the subject sentence. The order in which the speaker will discuss the various divisions can now be determined in the light of the audience attitude, the purpose of the speaker, and the response being sought.

Introduction and Conclusion

Finally there is the question of how will I introduce my speech and how will I conclude it? We need to remember that an introduction is to establish audience contact and place the speaker and the audience on equal footing—common ground; to arouse curiosity and interest in the subject to be discussed; and to open the way to the discussion of the first point in the speech itself. And the conclusion should summarize, reiterate, amplify, or drive home the speech and its major ideas and purposes.

This leaves only the fourth step in speech preparation to be taken care of: "sugar-coating the pill" to make it palatable—to get it down easy—(or should I say, "across"). May I suggest that the "sugar-coating" should not in any way destroy or neutralize the essential ingredients of the speech. And I venture to state boldly that the sugar and sweet-tasting stuff should never be substituted for the basic ingredients themselves. To change the figure a bit, remember that the pants on the lamb-chops will never become an acceptable substitute for the meat of the chops themselves, even though they do make the chops look nice and, if you wish to use your fingers, easier to handle. Sugar-coating of the speech pill simply means the utilization of certain basic technics designed to make the accomplishment of the audience response both easier and more certain. Can I disarm the audience through the use of good humor? Can I show them the easy, profitable, or effortless way of acceptance of my ideas? Can I appeal to their happiness, comfort, wealth, power, health, parental instinct, safety or self esteem? If I can relate my ideas to these universal human drives, then my audience is more apt to accept them. Thus I accomplish my purpose in giving the speech, which generally is to move society in socially desirable directions, to control my environment, to resolve conflict, to improve and perpetuate the democratic process.

Summary

I know that most doctors like capsules or pills. Hence, let me put all that I have said into a semblance of capsule form.

I. Have something to say that's worth saying.
II. Want to say it.
III. Plan it and organize it in terms of your particular audience.
IV. Direct it toward accomplishing a particular objective.
V. Use simple, concrete, exact language.

The final result should indicate to the audience that.

the speaker is well informed on his subject, that he has selected worthwhile material, that his ideas are for *this* audience, that his ideas are well organized, that he has sufficient evidence and reasoning to warrant his conclusions, and that he respects his hearers.

George Pierce Baker summed it all up in "An Open Letter to Teachers" when he wrote: ". . . Ideal public address means. . . significant thought presented with all the clearness that perfect structure can give it, all the force that skillful understanding of the relation of the audience to speaker and subject can give, with vivid narration and description, a graceful style, and an attractive personality . . . . The secret of public address today is then: Have something to say; something you wish to say; something you wish to say so that those who hear you shall understand and act as you desire. . . .Select from [your] own experiences or wide reading that aspect of a current topic which will most interest the audience. . .or which [you] are best fitted to present to that audience;. . .plan the presentation of it well; . . .and make the product reflect in thought and phrase the individual behind it."

THE INDEXER'S LAMENT

The huge (1052 p.) cumulative index issue of the 1951 *Current List of Medical Literature* has finally made its appearance. This annual cumulation of the monthly combined author and subject indexes is published in two parts (A–L, M–Z) because of the binding problems which its size presented.

The editing of the more than half a million entry slips was begun toward the end of last summer. The actual interfiling of slips was completed at the beginning of November, after the return of the November manuscript from the Philadelphia printing establishment responsible for publication of the *Current List*. A double 24-hour shift was instituted in mid-November to handle the work of mounting and assembly. The job was completed on 20 December, and shipment of manuscript was made on the following day.

Then began a series of delays over which we were unable to exercise control. A tentative delivery date was set for the end of January; various complications encountered by the printer forced this date forward into February. A succession of promised delivery dates passed by; while some copies of the publication were available earlier at the Army Medical Library, the final shipment did not reach us until 28 February. . . .

It is a satisfaction finally to have carried through this large task. But in spite of all efforts, and they were considerable, the resulting product has grave defects. It is discouraging, for example, to find that a howler like CYCCYX has escaped proofreaders, editors, and filers; it is disheartening to see in so many areas the page after page of references unbroken by main headings, even though to this eventuality we had become resigned during the process of cumulation.

On the positive side, the cumulation is an improvement over the previous cumulative issue; to anyone who will take the trouble to make comparisons, it also should be clear that the organization of this cumulative index is better than that of any individual monthly index which preceded it. In spite of the difficulties it presents, it should be a boon to all who work with medical literature. The provision of a subject and author index to over 100,000 articles of a single year, appearing fairly promptly at the close of the period, is no mean feat; it is, in fact, the largest current index in the world, if we consider it only from the point of view of number of articles represented.

After the event, it is obvious that such an index is too large for easy and efficient use; since it has to be printed in two volumes, it would have been better to cumulate it semi-annually in the first place. As the preface to the January issue (which follows on the heels of the December cumulative issue) explains, the six-months cumulation plan will be put into effect, along with other farreaching changes which should offset in great degree the many difficulties which we have experienced with Volume 20. Meanwhile, of journals there is no end. The February issue of the Current List (Vol. 21, No. 2) is at the printers, and the March issue is scheduled for completion on 27 March.

—*Army Medical Libarary News, March 1952*

News and Personals

The first **Postgraduate Course in Diabetes and Basic Metabolic Problems** to be conducted by the **American Diabetes Association** will be offered under the direction of Charles H. Best, C.B.E., M.D., F.R.S., Director of the Banting and Best Department of Medical Research of the University of Toronto, on January 19, 20, 21, 1953, at the University of Toronto, Canada.

Over 30 lectures and round-table discussions have been planned as well as a social evening. The Course is open to nonmember physicians as well as to members of the ADA, but the number of registrants will be limited to 100. Fees are $20 to members, $40 to nonmembers. Details of the 3-day program and registration and hotel information may be obtained from Mr. J. Richard Connelly, Executive Director, American Diabetes Association, 11 West 42nd Street, New York 36, N. Y.

The 13th Annual Congress on Industrial Health of the AMA will be held in Chicago at the Drake Hotel, January 20–22, 1953. The Joint Conference of the Council and the Chairmen of the State Committees on Industrial Health will be held on January 20.

The 49th Annual Congress on Medical Education and Licensure, conducted under the auspices of the Council on Medical Education and Hospitals of the AMA and the Federation of State Medical Boards of the United States, will be held at the Palmer House, Chicago, February 9 and 10, 1953. On Sunday morning, February 8, preceding the Congress, the Advisory Board for Medical Specialties will hold an open meeting at the Palmer House. Physicians are requested to refer to the Annual Congress when writing to the Palmer House for hotel reservations.

The Medical Society's **Section on Ophthalmology** will meet on January 6, 1953 at the Kennedy-Warren. The guest speaker will be Dr. Edmund B. Spaeth of Philadelphia, Professor of Ophthalmology, Graduate School, University of Pennsylvania School of Medicine. Dr. Spaeth will talk on "Muscle Surgery."

The guest speaker, November 11, was Dr. Wendell L. Hughes of Hempstead, New York; his subject, "Cataract Sutures."

The Washington Psychiatric Society will hold its annual meeting on January 16. Dr. D. Ewen Cameron, President of the American Psychiatric Association, will be present to speak on "Unorthodox Concepts in Psychotherapy." The meeting will be held in the Medical Society's building at 8:30 p.m.

The Washington Gynecological Society will meet for dinner at the Willard Hotel on Saturday, January 24 at 7 p.m. Following the dinner members will be addressed by Dr. Albert H. Aldridge, of New York, who is Clinical Professor of Gynecology and Obstetrics at Columbia University and Chief Surgeon in Gynecology and Obstetrics at Woman's Hospital. Dr. Aldridge will speak on "Vesico-vaginal Fistula."

On December 6 the following program was presented: "Early Diagnosis of Cancer of the Cervix," Dr. Roland Bieren; "Cesarean Hysterectomy," Dr. Samuel M. Dodek.

The Physician-Veterans of World War II have requested that a notice be placed in the MEDICAL ANNALS stating that additional members are most welcome. Applicants must be members of the medical profession in good standing and veterans of one of the armed forces. Applications for membership should be submitted to the Secretary, Dr. Alfred A. J. Den, 1801 K Street, N.W., Washington 6, D. C.

The 19th Annual Meeting of the American College of Chest Physicians will be held at the Hotel New Yorker, New York, May 28–31, 1953. Physi-

Calendar of Meetings, October 16–November 15

October 16	Medical Officers' Reserve Units Section on Radiology
October 20	Obstetrical Board Joint Board of Physical Evaluation
October 23	Committee on Care of Indigents Committee on Public Policy
October 24	Committee on Coöperation with D. C. Bar Association Subcommittee on Maternal Welfare Section on Pathology and Laboratory Medicine Washington Psychoanalytic Society
October 28	Membership Luncheon Subcommittee on Alcoholism Section on General Practice D. C. Society of Anesthesiologists
October 29	Board of Censors Lay Society, Diabetes Association of D. C.
October 30	Committee on Public Health Committee on Care of Indigents
October 31	Committee on Public Relations Committee on Interprofessional Relations Subcommittee on Diabetes
November 3	Executive Board Board of Censors
November 4	Membership Luncheon
November 5	Executive Board, Woman's Auxiliary
November 6	Committee on Care of Indigents Section on Neurology and Psychiatry
November 7	Classification Committee
November 10	Subcommittee on Mental Health
November 11	Medical Officers' Reserve Units Liaison Committee with Woman's Auxiliary
November 12	Committee on Public Health Woman's Auxiliary
November 13	Committee on Care of Indigents
November 14	Membership Luncheon Committee on Control of Tuberculosis, D. C. Health Department Washington Psychoanalytic Society
November 15	Washington Psychiatric Society

cians who wish to present papers at the meeting should submit titles and abstracts to Dr. Arthur M. Olsen, Chairman, Committee on Scientific Program, American College of Chest Physicians, Mayo Clinic, Rochester, Minn.

Applications are now available for the 500 **graduate fellowships** offered by **National Science Foundation** for 1953–54. Awards are available in mathematical, physical, medical, biological and engineering sciences. Although no awards will be made to students studying for M.D. degrees, those interested in medical research careers will be considered.

The majority of the fellowships will go to graduate students seeking master's or doctor's degrees in science, although a limited number of awards will be made to postdoctoral applicants. Fellows will receive stipends ranging from $1,400 to $3,400 plus certain dependent allowances. Application forms may be obtained from the Fellowship Office, National Research Council, Washington 25, D. C.

The National Foundation for Infantile Paralysis announces the availability of a limited number of **postdoctoral fellowships** in the field of public health and preventive medicine. The fellowships are for 1 or more years at an approved school of public health, with a period of field experience when arranged by the school. Stipends to fellows are based on the individual need of each applicant.

Eligibility requirements include United States citizenship, sound health, graduation from an approved school of medicine, and completion of at least a one-year internship in an approved hospital.

The Foundation also announces that a limited number of postdoctoral clinical fellowships are available in physical medicine and rehabilitation. Fellowships will cover a period of 1 to 3 years at training centers which have been approved for residencies in this field. Stipends to fellows are based on the individual need of each applicant.

Eligibility requirements are the same as listed above plus a license to practice medicine in at least one state. The age limit is 40.

In addition to these full-term fellowships, the Foundation is making available a limited number of short-term fellowships to physicians who wish to become better acquainted with physical medicine and rehabilitation as it relates to their particular specialties.

Complete information concerning these fellowships may be obtained from the Division of Professional Education, the National Foundation for Infantile Paralysis, 120 Broadway, New York 5, N. Y.

The Institute of Industrial Health of the University of Cincinnati will accept applications for a limited number of **graduate fellowships** in the field of industrial medicine. The candidate must be a graduate of a Class A medical school, a registered physician, and must have completed satisfactorily at least 2 years of training in a hospital accredited by the AMA. (Service in the armed forces or private practice may be substituted for 1 year of training.) Stipends for the fellowship vary from $2,100 to $3,000, in accordance with the marital status of the individual.

The course of instruction consists of a 2-year period of intensive training in industrial medicine, followed by 1 year of practical experience in industry. The degree of Doctor of Industrial Medicine will be conferred upon those who complete the course satisfactorily.

Full information may be obtained by writing to the Institute of Industrial Health, College of Medicine, Eden and Bethesda, Cincinnati 19, Ohio.

The American Medical Writers' Association, at its Ninth Annual Meeting in St. Louis, October 1, accepted a gift in excess of $2,000 from Dr. Harold Swanberg, of Quincy, Illinois, Secretary of the Association, to establish an "Honor Award for Distinguished Service in Medical Journalism." The award (a plaque) will be given each year at the Association's annual meeting "for accuracy, clarity and conciseness of published articles, editorials and other material, and/or distinguished and meritorious service, rendered by a United States or Canadian medical periodical."

Nominations for the Award must be made in writing and accompanied by an exhibit, in scrap book form, of supporting material published during the preceding year with dates of publication. Nominations must be made on or before February 1 of each year, addressed to the Secretary, W.C.U. Building, Quincy, Ill. All nominations will be evaluated by a special review committee, the actual selection to be made by the Association's Awards Committee.

No medical periodical may receive the Award more than once in a decade. This is believed to be the first award of this type to be established in North America.

At the business meeting of the Association, **Dr. J. DeWitt Fox,** of Washington, was elected Second Vice President for 1953.

The Committee on Medical Motion Pictures of the AMA announces the publication of a new **revised film list** which includes 78 medical films not readily available from other sources. A copy of the list may be obtained by writing to the Committee at 535 North Dearborn Street, Chicago 10, Ill.

The 46th Annual Meeting of the Southern Medical Association in Miami, Florida, November 10–13, drew a sizable attendance from Washington, D. C. Many members of the District Medical Society took an active part in the scientific program. Papers presented by Society members before sectional meetings were:

"Paraphenylenediamine in Dermatology," Dr. Louis Schwartz

"Physical Medicine and Rehabilitation as Applied to Geriatrics," Dr. A. B. C. Knudson, Chief, Physical Medicine and Rehabilitation Serivce, Veterans Administration

Chairman's Address (Section on Industrial Medicine and Surgery): "Human Relations in Industry," Dr. R. Lomax Wells, Medical Director, The Chesapeake and Potomac Telephone Companies. Dr. Wells also served on the Awards Committee for the Scientific Exhibit.

"Pheochromocytoma," Dr. Walter H. Gerwig, Jr., Assistant Clinical Professor of Surgery, George Washington University School of Medicine, and Brig. General Sam F. Seeley, MC, USA

"Application Complications of Hip Prostheses," Dr. Eugene G. Lipow

"The Gross Osteopathology of Arthritis," Dr. William J. Tobin, Associate Professor of Orthopedic Surgery, Georgetown University School of Medicine

"The Advantages of X-ray Diagnosis in Pregnancy," Dr. Robert H. Barter, Associate Professor of Obstetrics and Gynecology, and Dr. John L. Parks, Professor of Obstetrics and Gynecology, George Washington University School of Medicine

The District Medical Society was also well represented in the Scientific Exhibit and is proud to announce that the First Award went to Drs. Roy G.

Klepser and James F. Berry, of Georgetown University School of Medicine, for their exhibit on "Diagnosis and Surgical Management of Chylothorax." Following is a list of other exhibits presented by members of the Medical Society:

"ACTH and Cortisone in Blood Dyscrasias," Drs. Oscar B. Hunter, Jr. and Paul Kiernan, Georgetown University School of Medicine

"Why Do a Liver Biopsy?" Colonel Joe M. Blumberg, MC, USA, and Dr. Victor M. Sborov, Walter Reed Army Medical Center. This exhibit received honorable mention.

"Waterproof Plaster," Dr. Milton C. Cobey, Georgetown University School of Medicine

"The Value and Use of Curare in Obstetrics," Drs. Samuel M. Dodek and Joseph M. Friedman, George Washington University School of Medicine

"Progesterone Metabolism II: The Excretion of Pregnanediol in Normal Pregnancy," Drs. Richard H. Fischer and Stanley P. McColgan, Research Foundation, Doctors Hospital

The Fiftieth Anniversary Meeting of the Southern Medical Association will be held in Washington, D. C., in 1956.

The meetings of the **American Academy of Ophthalmology and Otolaryngology** in Chicago, October 12–17, attracted specialists in these fields from all parts of the United States. Washington was ably represented on the teaching faculty for the postgraduate courses presented by the Academy during the week of meetings.

Among the Washington ophthalmologists who made an especially large contribution to the teaching program were Drs. Frank D. Costenbader, Noel Stow, Marshall Parks and G. Victor Simpson.

Dr. Costenbader conducted a 12-hour course on "Concomitant Strabismus" with the assistance of Dr. Parks; Dr. Stow, an 8-hour course on "Applied Clinical Pathology" with assistance. A 1-hour course was given by Dr. Simpson on "The Office Management of Convergent Insufficiency and Divergence Excess."

In a Symposium on Strabismus Dr. Costenbader contributed a paper on "Principles of Treatment of Strabismus"; Dr. Simpson read a paper on "The Medical Management" before a Symposium on Convergence Insufficiency.

Dr. Irvin Hantman presented a paper on "A New Technic for Teaching Diseases of the Middle Ear and Tympanic Membrane" at one of the teaching sessions.

In a panel discussion on the Atlases of Pathology, Brig. General G. R. Callendar, Brig. General Elbert DeCoursey, Colonel J. E. Ash (ret.), Mrs. Helenor H. Wilder, and Dr. Muriel Raum, all of Washington and associated with the Armed Forces Institute of Pathology, participated.

Drs. Costenbader, Aram Glorig and Victor R. Alfaro, all Active members of the District Medical Society, hold committee appointments in the Academy. Dr. Glorig is a member of the Committee on Conservation of Hearing, Dr. Alfaro, of the Committee on Pan American Relations in Otolaryngology, and Dr. Costenbader represents the Academy on the American Orthoptic Council.

The Executive Board of the Medical Society of the District of Columbia held its regular meeting on November 3. Two new members were appointed to the Editorial Board of the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA, Dr. Frederic G. Burke, to succeed Dr. Joseph S. Wall, deceased, and Dr. Thomas M. Peery, succeeding Dr. Roger M. Choisser.

Dr. William P. Herbst was selected for the 1953 Kober Lecture, the Lecture which is given at Georgetown University each year in memory of Dr. Martin W. Kober. The Medical Society nominates the Lecturer every third year.

Dr. William J. Tobin was chosen to represent the Medical Society on the Executive Committee of the Greater National Capital Committee.

The Board approved the following appointees, submitted by President Yater, for the Committee on Interprofessional Relations: Drs. Samuel Benjamin, Alfred E. Jackson, Harold R. Downey and Alva D. Daughton.

Dr. Melvin A. Casberg, Chairman of the Armed Forces Medical Policy Council, Office of the Secretary of Defense, was proposed for Honorary membership in the Medical Society; the Board voted to recommend his election to the Board of Censors. Dr. Casberg has succeeded Dr. Richard L. Meiling as Chairman of the Council. Dr. Meiling, who is an Honorary member of the District Medical Society, is now Dean of the Ohio State University College of Medicine.

Approval was given to the choice of Harris &

Ewing as photographers for a composite picture of the Society's membership to be placed in the Society's building.

The Secretary read a report submitted to the President of the Society by Dr. Raymond A. Osbourn, who represented the Society at the National Conference on Citizenship, which was held in Washington, September 17, 18 and 19.

During the month of December the **Medical Museum of the Armed Forces Institute of Pathology,** 9th and Independence Avenue, S.W., is exhibiting all the American issues of the Christmas (Tuberculosis) Seal from 1907 to 1951. The Museum is open from 9 a.m. to 5 p.m. daily, including Sundays and holidays.

The Friends of the Armed Forces Medical Library was newly organized on October 24, 1952, at the Willard Hotel, with some 35 persons in attendance. Dr. Wilburt C. Davison, Dean of Medicine, Duke University, and retiring President of Honorary Consultants to the Army Medical Library, Inc. (now in the final stages of court proceedings leading to dissolution of the corporation), acted as chairman.

According to the Constitution and By-laws adopted, the purpose of the Friends will be "to promote knowledge of, and interest in, the functions, resources, and services of the Armed Forces Medical Library, and to support programs for its development." Membership in the Friends "shall be open to anyone interested in the purpose of the Friends, on nomination by a member and approval by the Executive Committee." Meetings are to be held annually, and dues were set at $2 a year.

Officers elected, each for a two-year term, were: Dr. Henry R. Viets, Chairman; Dr. Robert M. Stecher, Secretary-Treasurer; and Dr. Edward H. Cushing, Dr. E. B. Krumbhaar, and Dr. Atherton Seidell, Executive Committee members. The new organization hopes that many prospective members will now come forward. All interested persons are advised to write to the Secretary-Treasurer, Friends of the AFML, Armed Forces Medical Library, Washington 25, D. C.

George Washington University School of Medicine has received funds totaling $21,140 to permit continued study on two surgical research projects. Dr. Brian Blades, Professor of Surgery, is the chief investigator on both projects.

The U. S. Office of Naval Research has granted $10,757 to continue the clinical studies begun two years ago by Dr. Blades to evaluate and test new drugs and technics for administering the drugs in the control of pain associated with surgical procedures.

A $10,383 grant from the Veterans Administration permits continuation of a research project in lung ischemia. This research is a preliminary step to possible reconstructive lung surgery. It is being carried out at present through animal experimental studies under the direction of Dr. Howard Pierpont, Director of the Medical School's Surgical Research Laboratory.

George Washington University has also received two Public Health Service grants, totaling $37,699, through the National Heart Institute, to promote research and teaching in the field of heart diseases. Dr. John M. Evans, Associate Clinical Professor of Medicine, is in charge of administering both grants. A sum of $13,699 will permit continuation, for the fifth year, of research on liver dysfunction in congestive heart failure. Working with Dr. Evans on this project are Dr. Clayton B. Ethridge, Clinical Professor of Medicine, and Dr. Roy Hertz, Assistant Clinical Professor of Medicine. The other grant, $14,000, will allow the Medical School to expand its teaching facilities in connection with diseases of the heart. Assisting Dr. Evans in this program are Dr. Albert D. Kistin, Associate in Medicine, and Dr. Irene G. Tamagna, Clinical Instructor in Medicine.

Yellow fever vaccine, produced exclusively by the U. S. Public Health Service since 1942, will be manufactured in the future by the **National Drug Company** of Philadelphia. Withdrawal of the Government from yellow fever vaccine production is in accord with the PHS policy of turning over to the pharmaceutical industry the manufacture of biological products once large-scale production becomes feasible. Special plant facilities are now being constructed at Swiftwater, Pennsylvania, to produce yellow fever vaccine. Production of the vaccine at the Rocky Mountain Laboratory in Hamilton, Montana, a division of the National Institutes of Health, was terminated in September.

Major General Paul H. Streit, the first Army otolaryngologist certified by the American Board of Otolaryngology, was elected President of the newly formed **Society of Military Otolaryngologists.** The Society was formed during the annual meeting of the American Academy of Ophthalmology and Otolaryngology in Chicago, October 12–17. The purpose of the new organization is the advancement of the science and art of otolaryngology in the military services, to bring into one organization such specialists in the armed forces, and to further the social-professional contacts of its members.

Captain Adrian J. Delaney, MC, USN, is the first Vice President, and Colonel Vernon J. Erkenbeck, Chief of Walter Reed's Ear, Nose and Throat Section, is Secretary-Treasurer.

Dr. David E. Price is the first appointee to the newly created post of **Assistant Surgeon General of the U. S. Public Health Service.** In his new assignment he will assist Surgeon General Scheele and Deputy Surgeon General Dearing in their administrative duties.

Dr. Price has been Associate Director of the National Institutes of Health for the past two years. He is a native of San Diego, Calif., and a graduate of the University of California School of Medicine at San Francisco. He also graduated from Johns Hopkins University School of Hygiene and Public Health, Baltimore, where he received his master's degree in Public Health and, subsequently, the degree of Doctor in public health administration.

Members of the staff of **George Washington University Hospital** and guests were invited to a showing of the film, "Mediastinal Tumors," November 7, at the Hospital. The movie, which represented the latest development in medical movies, a **three-dimensional film,** showed two tumor operations being performed by Dr. Brian Blades, Professor of Surgery at the University Medical School and Chief of Service in Surgery at the Hospital. Viewers saw the film through polarized glasses.

This new film will be used primarily for training purposes in hospitals, medical schools, and medical meetings throughout the country. It was produced under the direction of Floyd A. Ramsdell, in conjunction with the Hospital's Department of Surgery, and the Ethicon Suture Laboratories, Inc. It is the second such film to be made, the first one showing a surgical operation at the Lahey Clinic in Boston.

Dr. C. J. Van Slyke has been appointed an **Associate Director of the National Institutes of Health,** where he will assist Dr. William H. Sebrell, Jr., Director of the Institutes. Dr. Van Slyke previously served as Director of the National Heart Institute, a position he has held since its establishment by Congress in 1948.

Dr. Van Slyke will be succeeded at the Heart Institute by **Dr. James Watt,** who for the past several years has been in charge of the field laboratory of the National Microbiological Institute, located at Louisiana State University School of Medicine. Dr. Watt was also Associate Professor of Preventive Medicine at the University of Louisiana.

At a meeting of the **Executive Committee of Medical Service,** September 8, it was recommended that Dr. Frank D. Costenbader, Dr. Henry L. Darner, and Mr. Philip Talbott represent Medical Service on a joint committee with the Medical Society to study the problem of irregular charges by physicians for services to Medical Service patients. The Committee's recommendation was confirmed by the Board of Trustees at its meeting, October 7.

The Southern Maryland Medical Society held its Annual meeting at the Laurel Race Course, October 22. The following officers were elected:

Dr. Thomas A. Christensen, *President;* Dr. Frank Sousa, *Vice President;* Dr. Waldo B. Moyers, *Secretary-Treasurer.*

Drs. Christensen and Moyers are Associate members of the District Medical Society.

The Section on General Practice met in the Medical Society's Library, October 28. Dr. Zigmond M. Lebensohn, Associate Professor of Psychiatry, Georgetown University School of Medicine, and President of the Washington Psychiatric Society, was the principal speaker. The topic of his address was "The Psychiatric 'Half' of General Practice."

The Clinico-Pathological Society met on November 18 at the home of Dr. Arch L. Riddick. Dr. Walter W. Boyd presented a paper on "Medical

Bindings and Boundaries" during the scientific program.

Dr. John Minor took office, October 27, as President of the Society of Medical Consultants to the Armed Services for 1952–53.

Theodore Wiprud, Secretary of the District Medical Society, represented the Society at one of a series of three research advisory meetings called by the **Research Council for Economic Security.** Representatives of industry, labor, government, insurance, medical, hospital and community organizations were invited to attend the meetings, which were held in Pittsburgh, New York and Washington.

The Washington meeting, which was held in September, was in the nature of a progress report relating to the Nation-wide study of prolonged nonoccupational illnesses. The presentations were made by Gerhard Hirschfeld, the Council's Director, and Leon Werch, Director of Research. The Council, which is supported by contributions from private industry, said the full survey would seek to show the relationships between nonindustrial illness and occupation, income, age and sex. It also will cover the extent to which ill and injured workers are provided for through community medical facilities, employee benefit plans, and various forms of insurance.

Present at the meeting were representatives of the National Catholic Welfare Conference, U. S. Public Health Service, Commission on Chronic Illness, Brookings Institution, U. S. Department of Labor, Committee for the Nation's Health, U. S. Chamber of Commerce, Wage Stabilization Board, President's Commission on the Health Needs of the Nation, the Pennsylvania Railroad, and the Medical Society of the District of Columbia.

The Kober Medical Society held its first fall meeting on October 20 at the Army-Navy Club; Dr. James P. Kane was host for cocktails. Dr. G. Victor Simpson spoke on "The Investigation Required to Establish the Etiology of Iritis and Related Uveal Tract Inflammations."

At the meeting, November 17, Dr. J. Gordon Bell was host for cocktails. The principal speaker was Dr. William P. Herbst, Jr., who spoke on "The Prostate."

The meeting, December 15, will be a Christmas party and dinner at the Shoreham Hotel, 7 p.m., for members, their wives and invited guests. Dr. Don Knowlton and Dr. Russel S. Page are in charge of arrangements for the party.

Dr. Frank E. Wilson became Director of the Washington Office of the American Medical Association on September 1, succeeding Dr. Joseph S. Lawrence, who retired on that date. Dr. Wilson had served as Deputy Director of the Washington Office since February, 1949. Before joining the staff of the AMA, he was National Medical Director of the American Red Cross.

FRANK E. WILSON, M.D.
Director, Washington Office of AMA

Dr. Wilson is a native of Knoxville, Tennessee. He received his medical degree from the University of Tennessee College of Medicine in 1933, and the degree, Master of Public Health, from the University of North Carolina in 1947. He is a diplomate of the American Board of Preventive Medicine and Public Health.

After a few years of general practice in Mooresville, North Carolina, Dr. Wilson served as Health Officer of several counties in that state during the years 1939 to 1941. As a Reserve Officer in the Medical Corps of the U. S. Army, he was called to active duty in 1941. He rose from First Lieutenant to Colonel, serving at various posts both in this country and abroad.

Dr. Wilson has contributed much time and effort to community projects wherever he has resided, having taken an active role in Rotary, Kiwanis, and Boy Scouts, among other groups. In medical organizations of North Carolina, he served in various official capacities. He became an Active member of the District Medical Society in July, 1952.

At the annual meeting of the **District Division of the American Cancer Society,** October 13, Dr. Murray M. Copeland, Professor of Oncology, Georgetown University School of Medicine, was reëlected President. Other physicians reëlected to office were Dr. Harry H. Kerr, Vice President, and Dr. Calvin T. Klopp, Secretary.

The principal speaker at the meeting was R. Keith Cannon, Vice Chairman of the Division of Medical Sciences, National Research Council. Mr. Cannon stated that the Cancer Society now supports more than 250 research projects in 36 states and the District of Columbia.

New and continuation grants totaling $60,379 were announced at this meeting. Georgetown University received $15,349 to continue its cancer diagnostic and treatment clinic; George Washington

CALENDAR OF SPEAKERS

The following members of the Medical Society of the District of Columbia have addressed lay groups during the past several weeks. The Society maintains a Speakers Bureau, sponsored by the Committee on Public Relations, through which requests for speakers for lay groups can be filled.

Date	*Speaker*	*Subject or Title*	*Organization*
October 13	Dr. James J. Feffer	Tuberculosis—the Disease	Health Forum, sponsored by Jewish Community Center and D. C. Tuberculosis Association
October 26	Dr. Daniel L. Seckinger and Dr. S. Ross Taggart	Social Aspects of Venereal Disease	VD Series, WTOP—TV
November 5	Dr. Addison M. Duval	Mental Hygiene	Lyon Village Woman's Club
November 7	Dr. Thomas McP. Brown	Arthritis—Potentialities for Recovery	District Chapter, Arthritis and Rheumatism Foundation
November 10	Dr. Leonard T. Peterson	Mechanical Problems in the Treatment of Fractures of Bones	Society for Experimental Stress Analysis, Washington Section
November 13	Dr. Addison M. Duval	Mental Health Problems of College Students	Representatives of 16 District colleges, sponsored by D. C. Tuberculosis Association
November 17	Dr. Henry E. Andren	Psychiatric Aspects of Brain-disordered Children	Cerebral Palsy Association of Montgomery County
November 17	Dr. Julius Schreiber	Doing Our Job as Parents	Parents Group, Temple Beth-El, Alexandria, Va.
November 18	Dr. Julius Schreiber	Modern Family Living	Parents Group, Friends School
December 2	Dr. Julius Schreiber	The Emotional Needs of Children	Woodside Parent-Teachers Association
December 11	Dr. Julius Schreiber	Modern Family Living	Sisterhood of Temple Emanuel, Bethesda, Md.

University received $15,000 for the same purpose. A new grant was made to Howard University, providing a fellowship for Dr. James A. Mitchell to assist in cancer teaching at the University and to serve in the tumor clinic at Freedmen's Hospital. Institutions which received smaller grants were the Instructive Visiting Nurse Society, Washington Home for Incurables, Children's Hospital, Garfield Memorial Hospital, and Episcopal Eye, Ear and Throat Hospital.

An Institute on Children's Eye Health, sponsored by the District of Columbia Society for the Prevention of Blindness, was held on four consecutive Thursday afternoons beginning October 9. Four members of the District Medical Society participated in the first of the series. Dr. J. L. Helfgott, school ophthalmologist, was chairman. The following lectures gave a medical background on children's eye health: "Structure and Function of the Eye," Dr. C. Worth Sprunt; "Eye Muscles; Strabismus or Cross-eye," Dr. Dorothy B. Holmes; "Eye Disease and How to Prevent Eye Defects," Dr. E. S. Caldemeyer; and "Refraction and Glasses," Dr. James B. Bain.

Special problems in vision testing and testing technics were presented by Mrs. Rosalie Sauber, formerly Vision Testing Consultant, Maryland Society for the Prevention of Blindness, on October 16 and 23.

Dr. Marshall M. Parks gave a lecture on "Good Eye Habits and Preventing Eye Accidents" at the concluding session, November 6.

Drs. Frank D. Costenbader and G. Victor Simpson served on the committee which arranged the Institute. The sessions were held in the auditorium of the National Museum.

Excavation was begun, October 14, for the **new George Washington University Cancer Clinic** and research center at 23rd Street and Washington Circle. In addition to a cancer diagnostic and detection clinic, the center will provide cancer educational facilities, laboratories and other accommodations for cancer research. It will replace the present facilities at 1335 H Street, N.W.

The structure, to be three stories high, with 80 rooms, will be known as the Helen L. and Mary E. Warwick Memorial Building. It is being financed, in part, from a $350,000 grant from the Washington Home for Foundlings, which affiliated its cancer activities with the University in 1948. Further assistance has come in the form of a $200,000 grant from the National Cancer Institute of the USPHS. The total cost will be $600,000.

Robert V. Fleming, President of the University's Board of Trustees, announced the plans for the new building at the opening assembly of the School of Medicine, September 15.

The annual Tri-City Meeting of the Philadelphia, Baltimore and Washington neurological societies was held this year on Friday, November 7, at the College of Physicians in Philadelphia. Some 15 Washington physicians attended the meeting.

The scientific program was presented by the Philadelphia group. Discussants of the papers from the Washington area included Drs. Francis M. Forster, Jonathan M. Williams and William T. Spence.

Dr. Harvey H. Ammerman, Secretary of the Washington Section on Neurology and Psychiatry, represented the officers of the Section and presided over part of the meeting; Dr. Harold Stevens represented its Executive Board.

The Washington Society of Pathologists held its regular meeting, December 5, at the Army Medical Service Graduate School, Walter Reed Army Medical Center. Interesting cases were presented by Drs. J. B. Horrell and J. S. Howe of Veterans Administration Hospital. Dr. Thomas M. Peery, Professor of Medicine, George Washington University School of Medicine, spoke on "Does Brucellosis Cause Calcific Aortic Stenosis: The Pathologic Evidence." A paper on "Salmonella Infections Complicating Relapsing Fever (Troops in Korea)" was presented by Lt. Colonel L. E. Zimmerman, MC, USA, of the Armed Forces Institute of Pathology.

The Montgomery County Council appointed 12 new members, October 21, to serve for one year on **The Commission for Medical Care for Montgomery County.** Among the appointees were Drs. Austin B. Rohrbaugh, John O. Robben, and William A. Linthicum, representing the Montgomery County Medical Society; Dr. Henry P. Laughlin, the Montgomery County Mental Hygiene Society; and Dr. John F. Brownsberger, the Washington Sanitarium and Hospital. All of these physicians, except Dr. Linthicum, are Associate members of the District Medical Society.

Dr. J. Ogle Warfield, Jr., was elected President of the St. John's Alumni Association during homecoming weekend in Annapolis the latter part of October. Dr. Warfield is a Washington surgeon who has practiced in the District of Columbia for 25 years.

One of the Association directors chosen was also a Washington physician, **Dr. Vernon M. Padgett,** Director of the District Health Department's Bureau for Tuberculosis.

Dr. Frank J. Grabill participated in the 3rd Annual Refresher Course Program of the American Society of Anesthesiologists in Philadelphia, November 11–14. The subject of his lecture was "Anesthetic Management in Ludwig's Angina."

Dr. F. Daniel Suttenfield was appointed a Vice President of the Pan American Medical Association for 1952–53 by the Board of Trustees.

Dr. J. Winthrop Peabody, Chairman of the Council on Postgraduate Medical Education of the American College of Chest Physicians, was moderator at the opening session of the Fifth Annual Postgraduate Course on Diseases of the Chest, sponsored by the Council and the New York State Chapter at the Hotel New Yorker, New York City, November 10–15.

Drs. Joseph A. Bailey, Jason Geiger and William E. Nessell have been recalled to active duty in the Medical Corps of the U. S. Navy. Dr. Bailey is stationed at the Naval Medical Center in Bethesda, Md. Dr. Geiger is serving on the staff of the Naval Hospital in Bainbridge, Maryland. Dr. Nessell is on duty at the Naval Dispensary in Washington.

Dr. Julius S. Neviaser was in New York City, November 1, attending the annual meeting of the Hospital for Joint Diseases. He gave a paper at the meeting on "Common Injuries of the Shoulder."

Dr. Neviaser, who is President of the Washington Orthopedic Club, addressed members of the Club, October 27, on "Ruptures of the Rotated Cuff of the Shoulder." The meeting was held at George Washington University Hospital.

Three Washington physicians have been elected to fellowship in the American Academy of Pediatrics. They are **Drs. John Philip McGovern and Stanley H. Steinberg,** Active members of the District Medical Society, **and Dr. Thomas A. Christensen,** an Associate member of the Society.

Dr. Isadore Levin was one of the speakers at the 13th Annual Scientific Convention of the Mid-Atlantic Association of Chiropodists-Podiatrists, which met in Washington at the Wardman Park Hotel, October 18–19. Dr. Levin spoke the first day on "Physical Medicine in Foot Conditions."

The National Headquarters office of the American Legion announces the appointment of **Dr. Gerald H. McAteer,** as a medical consultant to the Rehabilitation Commission. Dr. McAteer, who distinguished himself as a Naval medical officer in World War II, is Assistant Professor of Surgery at Georgetown University School of Medicine.

Dr. Peter N. Lombard, an Affiliate member of the District Medical Society, has been elected Lieutenant Governor of the Capital District of Kiwanis International. Dr. Lombard retired recently as President of the Silver Spring Kiwanis Club.

Dr. William G. Puryear left Washington in November to take up practice in South Boston, Virginia. His address is 1103 Wilborn Avenue.

Dr. Mario Scandiffio has opened an office for the practice of pediatrics in Miami Shores, Florida, at 290 Northeast 91st Street.

MEMBERSHIP

The following applicants for membership were duly elected to membership at the meeting of the Executive Board, November 3, 1952, in accord with Amendment XI, Section 2, of the Constitution and By-laws of the Society.

Active Members

Charles E. Bickham, Jr., 5705 Chillum Heights Drive, Hyattsville, Md.
Edward J. Carry, Providence Hospital
Beatrice di Marco, Gallinger Municipal Hospital
William H. Cooper, 4201 Massachusetts Avenue, N.W.

David Eden, 2025 Eye Street, N.W.
Max J. Fischer, 915 19th Street, N.W.
Lt. Thomas P. Fogarty, MC, USA, Fort Sam Houston, Texas
Bela Gondos, 1720 Connecticut Avenue, N.W.
Michel M. Healy, 1801 Eye Street, N.W.
R. Frank Jones, 717 Florida Avenue, N.W.
John W. Lawlah, 2208 Georgia Avenue, N.W.
Thomas F. McDermott, 3800 Reservoir Road, N.W.
Robert L. Regan, 2303 Tunlaw Road, N.W.
Frederick T. Reuter, 1835 Eye Street, N.W.
Bina Roth, 3140 Wisconsin Avenue, N.W.
Maryjo Roth, 2240 North Trenton Street, Arlington, Va.
Roland B. Scott, 1114 Girard Street, N.W.
Charles R. Webb, 4628 Kenmore Drive, N.W.
Thomas M. Wilson, 1673 Columbia Road, N.W.

Associate Members

William D. Dolan, Arlington Hospital
Charles Farwell, 10310 Greenfield Street, Kensington, Md.
James Blaine Fitzgerald, 8 East Underwood Street, Chevy Chase, Md.
Leanhard J. Hantsoo, 2609 Evarts Street, N.E.
Fuad I. Kaibni, 532 20th Street, N.W.
Alec C. Levin, 1835 Eye Street, N.W.
John P. Lindsay, 3636 16th Street, N.W.
William B. Ober, 2430 Pennsylvania Avenue, N.W.
Helen K. O'Brien, 26 West Montgomery Avenue, Rockville, Md.
Joseph W. Pidgeon, Gallinger Municipal Hospital
John S. Rogers, 2419 Churchill Road, Silver Spring, Md.
Thomas W. Stewart, 6 Adele Street, Lynchburg, Va.
John C. K. Yu, Garfield Memorial Hospital

Resident-Intern Member

Jorge B. Morales-Rodas, 1475 Euclid Street, N.W.

HENRY JOSEPH CROSSON, M.D.

(1870–1952)

Dr. Henry J. Crosson, well known in Washington as a physician and leader in public welfare activities, died, September 18, 1952, at his home, 2941 28th Street, N.W. For more than half a century he had served as physician to all strata of society, and to some families over a span of four generations. He retired from active practice in 1945.

Dr. Crosson was born in Minneapolis, Minn., March 7, 1870, and came to Washington in 1886. After receiving his medical degree from Georgetown University School of Medicine in 1890, he went abroad for postgraduate study in Vienna, Berlin and London. For about 40 years his office and home were located at 1746 M Street, N.W. He served on the staffs of Georgetown, Gallinger and Providence Hospitals.

Dr. Crosson was particularly active in Catholic Charities. He became a member of its first Board of Directors in 1928, and from 1934 until 1948 was its President. He was also a member of the Board of Public Welfare, serving on the Board from 1929 to 1942.

He became an Active member of the Medical Association of the District of Columbia in 1893, and of the Medical Society in 1894. He attained Life membership in 1934. He was an Associate Fellow of the American Medical Association, and a member of the Georgetown University Alumni Association and the District of Columbia Tuberculosis Association. He was the oldest active member of the Cosmopolitan Club and belonged to the Association of Oldest Inhabitants. He was a charter member of the Washington Council of Knights of Columbus, having occupied some of its highest offices, and was a member and Past President of the Friendly Sons of St. Patrick. He attended St. Matthew's Cathedral for almost 50 years.

His wife, Mrs. Margaret Blaine Crosson, survives him together with two daughters, Mrs. Theressa C. Pepper of the home address, and Mrs. Donald Wiley of Toledo, Ohio.

LEROY LEE SAWYER, A.B., M.D.

(1898–1952)

Dr. Leroy L. Sawyer, well known Washington otolaryngologist, died unexpectedly on Sunday, November 9, 1952. One of the younger specialists in his field, Dr. Sawyer was at the height of a successful career in medicine. In 1950 he founded the Conservation of Hearing and Speech Clinic at Episcopal Eye, Ear and Throat Hospital, and as Director of the Clinic took justifiable pride in its accomplishments.

Dr. Sawyer was born in Great Bridge, Virginia, December 2, 1898, the son of a physician, Dr. Leroy L. Sawyer, and Etta H. Sawyer. He received his A.B. degree from Randolph Macon College in 1920 and his medical degree from the Medical College of Virginia, Richmond, in 1922. He interned for a year at Sheltering Arms Hospital, Richmond, and for several months at De Paul Hospital in Norfolk. For a year and a half he received postgraduate training in his field at Episcopal Eye, Ear and Throat Hospital in Washington.

Dr. Sawyer began private practice in otolaryngology in the District of Columbia in 1928; his offices were at 1746 K Street, N.W. At the time of his death he was surgeon and a member of the Board of Trustees of Episcopal Hospital. He was also on the staff of Emergency, Gallinger, George Washington and Children's hospitals, and Assistant Clinical Professor of Otolaryngology at George Washington University School of Medicine, which post he had held for more than a decade.

Dr. Sawyer was a diplomate of the American Board of Otolaryngology. He was a member of the American Medical Association, the District Medical Society, the American Academy of Ophthalmology and Otolaryngology, and the American Laryngological, Rhinological and Otological Society. He was a member of the Rotary Club, Temple Noyes Masonic Lodge, the University Club, and the Chevy Chase Club.

Survivors are his wife, Mrs. Blanche Wingo Sawyer, and two daughters, Jane and Lee Sawyer, residing at their home, 4911 Quebec Street, N.W. He also leaves his mother, Mrs. Leroy L. Sawyer, Sr., of Great Bridge, Va., and a sister, Mrs. Willard Hart of Farmville, Va.

President's Health Commission—Magnuson

(*Continued from page 655*)

Utopias or any magic devices to prevent death, but I have the utmost confidence that our proposals will inject some badly needed light where only heat has prevailed in the past few years.

I fervently hope that we can justify the faith in our labors of people such as David Dietz, the eminent medical editor of the Scripps-Howard newspapers, who wrote in that chain of newspapers a few days ago the following words:

"It is highly probable that the report of the President's Commission on the Health Needs of the Nation will mark the turning point in the course of American medicine. . . . A wise and statesmanlike report from the Commission, dealing squarely with the medical issues of the day, can well become a milestone in American history."

I know this hasn't been a very eloquent summary of the work of the Commission; I wish I had the power of words to convey to you the basic spirit and forthrightness which have motivated my colleagues in attacking this enormous assignment But I do want every doctor in America to know the real facts about our work.

Arthritis Program of PHS—Wilder

(*Continued from page 660*)

In the long run, advances against arthritis are as likely to result from a dollar invested in basic metabolic studies as from one applied to a direct attack on rheumatic disease.

The current rate of progress against arthritis, in laboratory, hospital, and clinic, fully justifies an intensification of research bearing on the problem, and an optimistic view of the future.

SUMMARY

The extent and significance of arthritis as a public health problem are discussed, and organized efforts to combat the disease are briefly reviewed. Demonstrated effects of cortisone and ACTH were important factors in the recent establishment of the National Institute of Arthritis and Metabolic Diseases within the Public Health Service.

The Institute's intramural program of research is described, with emphasis on recent developments; and the extramural programs of research grants, fellowships, and traineeships are explained.

As briefly outlined, the Institute will share the new Clinical Center of the National Institutes of Health. The relationship of the practicing physician, voluntary health agencies, and the Public Health Service in the field of rheumatic disease is defined.

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